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ABSTRACT

This project was developed as an alternative learning system for Advanced Placement history students. The project is accompanied by interactive text instructions and items of material culture from a culture box. Chapters include: (1) Introduction; (2) "A Rationale for Alternate Learning"; (3) "A Brief History of Experiential Education"; (4) "History Today"; (5) "Haptic in History"; (6) Conclusion. A resource list and bibliography conclude the text. Four appendices offer additional suggestions for inclusion of items in the culture box. (EH)

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HAPTIC HISTORY:
Teaching A.P. U.S. History through Kinesthetic Learning and Material Culture

Cathleen Coyle Randall

Klingenstein Fellows Project

May, 1996

SO 028 227

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To the other Fellows, I also owe a great deal. Without the weekly seminar discussions, this effort would not be as informed. In particular, I would like to thank Jean-Marc Juhel and Frances McCue for their review of this piece, and Kate Knopp and Virginia Carnes for their immeasurable support and thoughtfulness during the writing process. The faults are mine alone, however.

Most importantly I owe love and gratitude to my husband Brendan Randall and our dog Gerda Berner for their willingness to do without a wife and "puppy mom" for a year, especially in a year when the snows were thick.

Où sont les neiges d'antan? Here.

Enjoy the artifact.

Additional Note

This project is accompanied by interactive text instructions and items of material culture (in box which also contains the text you are reading). The combination of mediums seemed fitting for the nature of the topic. It is intended to provide some fun for the reader as well as illustrate the thesis of the project. Please feel free to handle the materials. Please also respect the materials and leave them for others to enjoy.

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INTRODUCTION

Why haptic history?

As an instructor of high school U.S. history I watch my students reactions to the final required history course of their lives. Some of them love history. Some love history, but not what I teach because I focus on social, economic, and political processes usually at the expense of wars. Their previous teacher has done a fabulous job with military and diplomatic history and these kids want more of the same. Some student hate history because they have to write and they feel confused and inadequate at writing. To them history means writing. Some are angry at history because there is little in the narrative that resembles their experience. Some see it as a yawn-- the same old, same old. Some just don't get it.

All in all, this describes a pretty typical class for the age group. But, like most instructors, I want something more. I want all of them to understand it, be interested in it, and, to like it. I want them to be able to use the skills of history on their own. I even want to connect history to the larger world of humanities and social sciences. And I need to meet them where they are.

For several years now I have been trying to find out where these students are. To that end, I have administered a learning styles inventory to all of my classes. I have found that most of the students prefer visual and auditory learning, as expected. But, surprisingly, I found that consistently 20% of my small Advanced Placement U.S. History class scored highest in haptic learning. I would give them study skills advice based on their learning style, and then I hoped for the best. I continued to stress lecture and reading and writing as instructional methods. Not surprisingly, these kids often had a difficult year....

What is "haptic history'?

When instructional method does not meet student capabilities, and then move them toward the desired goal, something is wrong. When the haptic learners struggled in a course that required consideraable amounts of reading and writing, I began to review my own teaching.

I have found that different kids have different strengths, learning styles and intelligences. The curriculum should address all of these.

History is not just about words written on paper. Evidence from artifactual sources -- material culture-- in combination with other sources provides a deeper understanding about the processes of change at work in the world. Experiential learning, the activity of a person in time and space, assists memory. The selective use of artifacts and experiences can draw deeper meaning into the nature of past events.

Finally, I have found that my teaching and the students' learning can be improved by the application of these insights. What follows is an attempt to combine material culture and kinesthetic learning into something I'll call "haptic history". It's a work in progress...

...isn't all history?

CHAPTER ONE: A RATIONALE FOR ALTERNATIVE LEARNING

Theories of Cognitive Development

When thinking about learning it helps to have an understanding of cognitive development and adolescence.

Piaget represents the preeminent cognitive theorist.[1] Piaget posited four stages of cognitive development: sensory-motor (0-2 years); representational (2-6 years); concrete operations (7-11 years); and formal operations (12-15 years). Each stage represents an increasingly abstract form of cognition. Piaget argued that learning was not possible until development had occurred, although within a stage the tension between new objects and old structures (assimilation and accommodation) would produce change in cognition. As the child matured, new structures of thought replaced the old. Adolescents returned "to a more active orientation, but it is an active orientation that is now modified by the development of the reflective and abstract power that proceeded it."[2] Thus, the adolescent thinker manipulates abstract symbols when considering the world around them. But this young adult also can access earlier stages of thought as well as function in the abstract operations stage.

Piaget's work continues to influence cognitive pyschology. Most of Piaget's applied work focused on mathematical and scientific thinking, thus limiting the research base from which we can work. Although Piaget did not focus his research on adolescent thought, he did note the ways in which the adolescents drew patterns of inference from their observations of scientific experiments. Piaget found that adolescents could develop theories abstracted from the date given them. In addition

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[1] See Herbert P. Ginsburg and Sylvia Opper, Piaget's Theory of Intellectual Development , 3rd ed. (Englewood Cliffs, NJ: Prentice Hall, 1988). I am indebted to Prof. Ginsburg for his course this term.

[2] David A. Kolb, Experiential Learning: Experience as the Source of Learning and Development (Englewood Cliffs, NJ: Prentice Hall, 1984), 24.

to his description of formal operations, Piaget also noted the importance of social transmission (the influence of the social context on the adolescent's thinking) and the physical world on how the formal operations learner considered the world.[3]

A now-popular alternative to Piaget is his Russian contemporary Lev Vygotsky. Vygotsky saw learning as essentially social and that cognitive development could be stimulated by interaction with more experienced (developed) others.[4] When confronting something new, the child would be stimulated by the tension between her actions and her potential-- something Vygotsky termed the "zone of proximal development." As experiential learning theorist David Kolb explains, Vygotsky saw learning and human development resulting from interactions between an individual and society (as expressed in symbols, tools, and cultural artifacts).[5]

A combination of Piaget's and Vygotsky's theories provides an sense of what learning could be. Other cognitive psychologists have tried just that.[6] David Perkins' Smart Schools provides the best overview of how a knowledge of cognitive development and social interaction can inform educational practice.[7] Perkins reminds the reader that "the challenges of learning can often be clarified through a developmental perspective that examines the age and sophistication of the learner, one that asks about developmentally appropriate attainments and means of instruction."[8] He does, however, take Piagetian theory to task for its insistence that

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3 Ginsburg and Opper, Piaget's Theory, 214, 219.

4 L.S. Vygotsky, Thought and Language (A. Kozulin, trans.) (Cambridge, MA: The MIT Press, 1986); Ronald Gallimore and Roland Tharp, "Teaching Mind to Society: Teaching, Schooling, and Literate Discourse" in L.C. Moll, ed., Vygotsky and Education: Instructional Applications and Applications of Sociohistorical Psychology (Cambridge, UK: Cambridge University Press, 1990), 175-202.

5 Kolb, Experiential Learning, 133

6 Barbara Rogoff, "Children's Guided Participation and Participatory Appropriation in Sociocultural Activity" in R.H. Wozniak and K.W. Fischer, eds., Development in Context: Acting and Thinking in Specific Environments (Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers, 1993); J.S. Brown, A. Colins, and P. Duguid, "Situated Cognition and the Culture of Learning", Educational Researcher 18:1 (1989), 32-42.

7 David Perkins, Smart Schools: From Training Memories to Educating Minds (New York: Free Press, 1992).

8 Perkins, Smart Schools, 62.

children cannot learn before they are "ready." Pointing to Jerome Bruner's work, Perkins presents evidence that children can learn "higher order concepts "when the content is familiar, representations are concrete, and supports for short-term memory (for instance, paper and pencil) are available."[9] Perkins also includes the Vygotskian perspective of social influences. In his discussion of classrooms , Perkins argues both for experiential education ("distributed cognition") and for the use of concrete manipulatives (what he calls the "person-plus perspective") in the classroom. In describing his work (Perkins partners Howard Gardner in Project Zero) and that of others, Perkins explains:

> We argue that human cognition at its richest almost always occur in ways that are physically, socially, and symbolically distributed. People think and remember with the help of all sorts of physical aids, and we commonly construct new physical aid to help ourselves yet more. People think and remember socially, through interaction with other people, sharing information and perspectives and developing ideas.[10]

Unfortunately, cognitive psychology retains much of its Piagetian emphasis, especially the focus on the young child. As studies of adolescent psychology show, it is important to keep in mind that important changes take place between twelve and seventeen, and continue afterward.[11] Adolescents continue to view their world in concrete terms but are moving toward abstraction. Relativism, the ability to think abstractly and to shift perspectives, may not be developed. A concern for the moral rule of law and other abstractions exists for teenagers, but a personal code (moral or

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9 Ibid.

10 Perkins, Smart Schools, 134.

11 For example, see Kurt W. Fisher and Catherine C. Knight, "Cognitive Development in Real Children: Levels and Variations" in Robert J. Sternberg, ed., Learning and Thinking Styles:Classroom Interaction (Washington, DC: NEA, 1990). They see Piaget as too rigid and argue that intelligence has adaptability with a variety of modalities. They also posit two more stages of adolescent development: Abstract Mappings (14-16 years, "relations of intangible concepts") and Abstract Systems (18-20 years, "complex relations of subsets of intangible concepts"), 48.

academic) that relies on the self as a final arbiter remains incomplete. There is a greater concern with society. These characteristics of adolescent development may vary by gender[12] or by class and ethnic background.[13] But an overview of cognitive development is truly useful for an instructor of Advanced Placement United States History. Students want to consider the world at large and most have developed the cognitive capacities to do so. They will respond to concrete means and analytical concepts presented in a thoughtful historical context.

STOP! How much of the above section do you remember? Did you take notes? If not, skim the section and take notes. Without looking at the notes, ask yoursel f what you remember. Does this tell you anything about activity and memory?

Learning Styles and Multiple Intelligence Theory

Most academics have forgotten that their preferred mode of information gathering represents a minority of the public's learning style. In his review of museums historian James William Miller noted 1986 research which showed that

> ...approximately seventy-six percent of a random sample of the American populace tended to place more weight on their own direct experience in the making sense of the world than on abstract reasoning. The opposite was true for seventy-six percent of a sample of college faculty. This suggests that professors may have difficulty communicating their ideas to non-academics, because these ideas are generally presented within a a theoretical framework.[14]

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12 See Mary Field Belenky et al., Women's Ways of Knowing: The Development of Self, Voice, and Mind (New York: Basic Books, 1986). See also Eric Temple, Klingenstein Project, 1996.

13 P.M. Greenfield and R.R. Cocking, eds., Cross-Cultural Roots of Minority Child Development (Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers, 1994). All of the articles are helpful, especially the overview by Patricia Greenfield and the summative article by John Ogbu.

14 James William Miller, "Museums and the Academy: Toward Building an Alliance" Journal of American Culture 12:4 (Summer 1989), 2-10, 4.

Other research confirms the Myers-Briggs findings. A 1993 study by Bennet reports that students who merely read and listened to lecture remembered 42% of the material delivered; students retained 80% of the material when it was experienced.[15] Lynn O'Brien's work with learning styles has found that 10 percent of student populations in secondary schools learns best by listening as opposed to 40 % by looking and 50% by doing, but 80% of secondary school instruction in done through lecture.[16] John Goodlad's 1984 "Study of Schooling" Project correlated with O'Briens: he found that 70% of national classroom time was consumed in lecturing to students.[17] I suspect that the percent of instruction for later adolescent and adult education that is lecture is even higher; students may be better equipped cognitively to listen, but is lecture appropriate preparation for occupational experience? Evidence emerging from the extensive work on Howard Gardner's multiple intelligences (MI) theory strengthens the awareness that most members of the United States public learn other than by traditional classroom means.[18]

What are learning styles? Learning styles are preferred modes of acquiring and synthesizing information. The NASSP defines learning styles as "characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning

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15 Bennett (1993) reported in David McDavitt, "Teaching for Understanding: Attaining Higher Order Learning and Increased Achievement through Experiential Instruction" (ERIC: May 1,1994; ED374093), 43. In McDavitt's own study, he found that his students scored 20-30% higher on tests if they had experiential learning rather than rote teaching. On a particular test, expository learners scored 68% and experiential learners 94% (54).

16 Lynn O'Brien, "Learning Styles: Make the Student Aware" NASSP Bulletin 75:519 (October1989), 85-89, 86.

17 Goodlad is cited in Thomas Armstrong, Multiple Intelligences in the Classroom (Alexandria, VA: Association for Supervision and Curriculum Development, 1994), 48.

18 Howard Gardner, Multiple Intelligences: The Theory in Practice (New York:Basic Boks, 1993).

environment."[19] There are a variety of learning style theories.[20] The one I have found most helpful, because of its simplicity and design for educational use, is Lynn O'Brien's "Learning Channel Preference Checklist". The checklist is designed to determine an individual's strengths in each of three major learning styles: auditory, visual, and haptic (kinesthetic). A person could display a strong preference for any combination of the three. O'Brien defines "haptic" learning as a combination of tactile and kinesthetic into "a Greek-based word meaning 'moving and doing'."[21] For this classroom instructor the instrument has been very helpful in determining instruction and study aides for classes.

Multiple intelligence (MI) theory is similar to learning style theory but has important differences. Proponents of multiple intelligence theory distinguish learning styles from MI theory, claiming that learning styles are sensory-channel models specifically tied to the senses while MI theory is a cognitive model "that seeks to describe how individuals use their intelligences to solve problems and fashion products."[22] This difference may not be as distinct as claimed.

MI theory approach benefits learners because it values a variety of ways to learn and encourages instructors to use a variety of methods in order to structure courses. There are seven basic intelligences according to this theory: linguistic, logico-mathematical, spatial, bodily/kinesthetic, musical, interpersonal, and intrapersonal.[23] Gardner and his followers argue that all people possess all seven intelligences and can develop each of the seven to adequate competency. In addition, the intelligences work together through mutual reinforcement and have high variability

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19 NASSP, 1979, cited in Nancy Kroonenburg, "Learning Styles and Language Learning", Klingenstein Fellows Project, 1990, 3.

20 For a superb overview see Nancy Kroonenburg, "Learning Styles and Language Learning", Klingenstein Project, 1990.

21 O'Brien in Kroonenburg, 7.

22 Thomas Armstrong, Multiple Intelligences in the Classroom (Alexandria, VA: ASCD Press, 1994), 14.

23 The basic introduction is Howard Gardner, Frames of Mind: The Theory of Multiple Intelligences (new York: Basic Books, 1983).

within each type of intelligence.[24] There is ample room for development of individuals and curricular activities based on multiple intelligence theory.

Two of Gardner's multiple intelligences suit our purposes here. The first is spatial intelligence. Spatial intelligence has been extensively studied and Gardner avoids going into fine detail in his overview. He defines spatial intelligence as "the positing of an internal mental image which can then be manipulated in ways that parallel operations in the workaday world." [25] Thus, spatial intelligence may seen visual, but it also refers to mental imagery, and so is not confined to "any particular sensory modality."[26] Bodily-kinesthetic intelligence incorporates movement into the expression of concepts. Gardner posits "two capacities-- control of one's bodily motions and capacity to handle objects skillfully-- as the cores of bodily intelligence."[27] He notes that it is possible to have these two elements exist separately, like the other intelligences, "but in the typical case, skill in the use of the body for functional or expressive purposes tends to go hand in hand with skill in the manipulation of objects."[28] Spatial intelligence seems to be a way of seeing, bodily-kinesthetic intelligence a way of doing.

MI theory has been tested in a number of classrooms. Several projects, such as Harvard's Project Zero or the entire Key School curriculum (Indianapolis, IN) have been based on multiple intelligence theory.[29] Classroom instruction actively presents material in all of the seven intelligences every day. These projects have shown that MI theory can work and that it brings the benefits of increased interest and attention, and

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[24] Armstrong, 11-12.

[25] Gardner, Frames of Mind, 177.

[26] Gardner, 176.

[27] Gardner, 206.

[28] Gardner, 207.

[29] See discussion of the Key School in Howard Gardner, Multiple Intelligences: The Theory in Practice (New York: Basic Books, 1993).; Project Zero is in Gardner's work, including Tina Bythe and Howard Gardner, "A School for All Intelligences" Educational Leadership 47:7 (April 1990) 33-37.

greater inclusion, by all members of the class or school.[30]

There are some drawbacks to the current use of MI theory. Some proponents tends to oversimplify Gardner's theory. Most notably some instructors use multiple intelligences as a method of categorization of students. This in turn becomes the only modality in which students are nurtured and encouraged to develop. While it is crucial for the self-esteem and learning of a child to know individual strengths, it is a goal of education to develop new abilities. Boxing children into one mode of learning at an early age, even if that mode is something other than logico-mathematical intelligence, brings the same problems as resting on a predominantly auditory mode of instruction. The student will not develop her or his intellectual capabilities to the fullest extent possible. At the most logical extreme, this could lead to real problems with cognitive development, as children in Piaget's concrete operations stage would likely be the most bodily-kinesthetic and spatial in their orientation but would never achieve the cognitive dissonance necessary to promote learning when they achieve formal operations.[31] Gardner's goal clearly was not this, but practitioners must be wary of the trap of oversimplification.

Nonetheless, as a practitioner, I see powerful connections between learning channels and multiple intelligences. Haptic learning is connected to the instructional strategies associated with spatial and bodily-kinesthetic learning. A review of the literature available on MI instructional technique reveals a lack of material on methods for appealing to bodily-kinesthetic learning, especially for adolescents. Adolescents, however, need a variety of methodologies to spur their intellectual growth.

Now please turn to Appendix I, the Learning Channel Preference Checklist. Find a friend to administer the inventory. Extra worksheets are in the box. What is your

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[30] See also, Robin Fogarty and Judy Stoehr, "Integrating Curricula with Multiple Intelligences: Teams, threads, and Themes, K-College" (1995), available through EDRS #ED383435.

[31] Perhaps this is overly behaviorist of me. I do not know of any research along these lines, but it could be fruitful line of inquiry.

preferred learning style? Take Item 1 from the box and squeeze it while reading the next section.

Whom would haptic learning help?

Haptic learning aids in the instruction of individuals in a number of ways. The available research indicates that benefits are applicable to such a wide variety of learners that the method should be promoted for all.[32]

Haptic learning would benefit children who score high in this learning preference. As this style is the least dominant mode of instruction its use would be both novel and appropriate for the haptic learner. The research of Mihaly Czikszentmihalyi evokes the connections here: in his early work on adolescents he found that an optimal level of enjoyment occurred when a person was challenged at a level that matched their level of skills[33] . This state of enjoyment Czikszentmihalyi would later term "flow". Part of the Key School is the "flow room" in which students are allowed to freely explore what interests them in the learning style/multiple intelligence that they prefer. Surely such a matching of student learning style to mode of instruction will improve performance.

Haptic learning would help children with learning difficulties. There seems to be a strong link between the underachievement of students with learning difficulties and the preferred modalities of teaching and assessment.[34] In other words, lecture and written assessment do not suit learners with language-processing problems.

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32 For example, see Susan Black, "Just Do It" Executive Educator 17:4 (April 1995) 33-36. Black points to research showing that connecting the mind and body through kinesthetic learning increases students' attention and achievement beyond just PE class.

33 Mihaly Csikszentmihalyi and Reed Larson, "Intrinsic Rewards in School Crime" Crime and Delinquency 24:3 (July, 1978), 322-335.

34 Dixon Hearne and Suki Stone, "Multiple Intelligences and Underachievement: Lessons from Individuals with Learning Disabilities", Journal of Learning Disabilities 28:7 (August/September, 1995); Thomas Armstrong, In Their Own Way: Discovering and Encouraging Your Child's Personal Learning Style (Los Angeles: Jeremy P. Tarchner Inc. 1987).

Thomas Armstrong argues that bodily-kinesthetic learning would develop skills necessary to academic learning, such as hand-eye coordination, left-right orientation, balance, reflexes, body awareness, manual dexterity, and other psycho-physical skills.[35] Separate studies have shown that braille, sign language, and Chinese ideograms provided alternative symbol systems for cognitive processing by dyslexic children. As reported by Armstrong in Multiple Intelligences in the Classroom:

> In each case, the linguistic symbol system (written or oral language) has been merged with bodily kinesthetic/spatial symbol systems that require, in addition to linguistic intelligence, tactile sensitivity (for braille) and manual dexterity and physical expressiveness (for sign language).[36]

Children learning language via Chinese seemed stimulated by the whole language approach, as well as the visual and kinesthetic aspects of production. And it seems no coincidence that the man who has become known as the key innovator in children museums was himself dyslexic.[37] One of the first projects he pioneered for the Boston Children's Museum was an activity kit that had students sort and categorize bird models. The children who had consistently been identified as slow learners in the class "would come up and do dazzlingly well....It was fascinating because it gave many more kids a chance to be successful."[38]

A variety of instructional modes seems most appropriate to a variety of cultural backgrounds as well. Because a students' previous learning and current non-school life may emphasize different ways of learning, it would make sense to connect to these other modalities.[39] Some research exists to complement this belief, although much of

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35 Armstrong, In Their Own Way, 82.

36 Thomas Armstrong, Multiple Intelligences in the Classroom, 138.

37 Donald Garfield, "Interview with Michael Spock", Museum News, November/December 1993, 35.

38 Ibid., 58

39 Greenfield and Cocking, eds., Cross-Cultural Roots of Minority Child Development (Hillsdale, NJ: Lawrence Erlbaum Associates,1994); Asa G. Hilliard, III, "Teachers and Cultural Styles in a Pluralistic Society" (1989) cited in Kroonenburg, 4.

it seems anecdotal. For critical learning theorists, who are concerned that classical educational strategies are based on the neo-Socratic ideals of the Western tradition, alternative strategies are only fitting.

Gifted and talented students also benefit from a variety of instructional modes. Although most gifted and talented students would score high in the logical-mathematical or linguistic category,[40] these students can make the most use of multiple intelligences curriculum. Gifted and talent students can make more connections, more deeply. Also, they are more likely to be looking for new and interesting ways to learn and make connections.

So while using various learning styles and multiple intelligences is not the panacea for all educational crises, it seems sensible that curriculum and instruction opens up to include a variety of means to reach a variety of people.

Combining Theory and Practice

What has been preventing such a revolution? A number of factors, not the least of which is the newness of Gardner's theory and the lack of research available, have slowed the application of learning style and multiple intelligence theory in the secondary classroom . Schools, especially independent schools, do not want to reject "tried and true" in favor of educational faddism which is unproven and possibly harmful.

Also, there is an ongoing bias, or at least caution, that such an emphasis on the haptic merely mires an individual in an earlier stage of cognitive development (concrete operations rather than formal operations). After all, most theories of cognitive development posit near-adulthood is the time that abstract, analytical thought

[40] This may reflect the self-fulfilling nature of I.Q. testing and teacher expectations (aka, the Rosenthal Effect).

should develop and be fostered. Those who would caution against the use of the tactile and kinesthetic argue that analytical thought would not be promoted by haptic teaching.

Given the applications for learning styles and multiple intelligences have been developed mainly for the primary grades, this criticism has validity. We should be considering higher order thinking.

"Higher order thinking" evolves from Harold Bloom's taxonomy of thinking. Bloom ranked six elements of thought (knowledge, comprehension, application, analysis, synthesis, and evaluation) and urged all instructional design build on these elements. The key is not to become mired in the "lower order" elements (the first three), although application of each can vary and there does not need to be strict sequential application of each level. A variety of types of thinking should be used in any one lesson. Bloom's ideas can be connected to those of Dewey and of Jerome Bruner, especially the concept of the "spiral of learning." As Dewey explained, learning would continuously reinforce the process of incorporation and evaluation of new information. Hilda Taba, pioneer of the critical thinking movement, built upon the concepts contained in Dewey. Critical thinking-- the application of analysis, synthesis, and evaluation-- needs constant practice urges Taba. The link to MI theory is anticipated in Taba's explanation of how curriculum design should fit adolescents:

> High school students are often expected to handle abstract generalizations in a given field, without first having had an opportunity to handle experiential materials in the same area through which to establish meaning for these abstractions.[41]

In other words, concrete experiences are the necessary components to build analytic

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[41] Hilda Taba, "The Problem in Developing Critical Thinking" (1950) in Stephen I. Brown and Mary E. Finn, eds., Readings from "Progressive Education": A Movement and Its Professional Journal, Vol. I (Lanham, MD: University Press of America, 1988), 305-306.

thought.

Haptic learning can provide the concrete experience to embody analytic, "higher order" concepts. One of the best applications of Gardner, Bloom, and Taba comes from the models of interdisciplinary curriculum designed by Heidi Hayes Jacobs. Jacobs is borrowing directly from the injunction from Taba to provide, at the high school level, instruction that is incremental, interdisciplinary, in groups, and thematic.[42] As different disciplines appeal to different learning styles and to different types of multiple intelligences, the connection between the work on interdisciplinary curriculum design and assessment should be an easy one to make.[43] As Jacobs argues, it is possible to design interdisciplinary curriculum that is both age/stage-appropriate and strong in a number of learning modalities. For late adolescents, the developmental needs as "oriented toward adult responsibilities and choices."[44] A curriculum that is experiential and interdisciplinary in content and instruction would meet those needs. A "haptic history" for college-bound students is appropriate.

Here are two answer to the cognitive critics of "haptic history". First, as Piagetians, "social learning theorists" and other cognitive psychologists argue, earlier stages can be recovered and used as a base for analytic thought. Accessing concepts through another mode of learning is a perfectly valid exercise. Second, analytical concepts can be expressed in the haptic style.

The experience of two history instructors demonstrate how the concrete

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42 Ibid. See also Heidi Hayes Jacobs, Interdisciplinary Curriculum: Design and Implementation (Alexandria, VA; Association for Supervision and Curriculum Development, 1989); Heidi Hayes Jacobs and James Borland, "The Interdisciplinary Concept Model: Theory and Practice", Gifted Child Quarterly 30:4 (1986), 159-163.

43 Personal communication with Heidi Hayes Jacobs, November 5, 1996. See also the comparisons between MI Theory and disciplines made in Armstrong, Multiple Intelligences in the Classroom. See also, Marian Martinello and Gillian E. Cook, "Interweaving the Threads of Learning: Interdisciplinary Curriculum and Teaching", NASSP Curriculum Report 21:3 (February,1992); Heidi Hayes Jacobs, "The Twenty-First Century: A Case for Developmental Schools, K-12" (n.d., n.p.).

44 Heidi Hayes Jacobs, "The Twenty-First Century: A Case for Developmental Schools, K-12", n.d, n.p.

connects to the analytical. Bill Bigelow, a secondary school history instructor in Portland, Oregon has been concerned about the inaccuracies of history for a long time. In response to the great Columbus Quincentennial, Bigelow was part of a project ("Rethinking Schools") that developed an alternative curriculum that would look at the impact of Columbus' arrival on the peoples already in the "America's".[45] In his own classes, and as part of his presentations to history instructors, Bigelow used an experiential method designed to get his students thinking about alternate interpretations of history. With the advance cooperation of one of his students, Bigelow would proceed to "discover" an item of that student's personal property. When the rest of the class protested, Bigelow would not relent. He continued in his insistence that he has discovered the item and it thus was his property. Students would continue to protest and argue until they made the connection that "discovery" and "stealing" are two views of the same situation.

I have used this technique to an all-school assembly of 150 as part of a Columbus Day presentation. In my case I "discovered" a student's purse, in which I had previously placed a tube of my own lipstick. I took the purse, rummaged through its contents, and then applied the lipstick. The shocked silence was deafening, then the protests began. Audience outrage had reached immense proportions when murmurs of "Ah! I get it!" and laughter began to punctuate the stubborn mood. Indeed, they had gotten it. An active experience had illustrated a higher order historical concept called "interpretation."

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[45] Bill Bigelow, "Teaching about Columbus" in Rethinking Columbus (Milwaukee, WI: Rethinking Schools, 1991). Also, I attended a presentation by Bigelow at the Minnesota Council of the Social Studies annual conference, November, 1991.

CHAPTER TWO: A BRIEF HISTORY OF EXPERIENTAL EDUCATION

Dewey: Experience and Education

Experiential education is rooted in John Dewey's educational philosophy. Although Dewey wrote many thought-provoking essays, we will focus here on his statements regarding experiential learning and history instruction.

Dewey the foundation of the educational mission to rest on experience. Experience would provide the means through which children would come to know their world and be socialized to live with each other in it. In short, children would grow from experience. As haptic learning combines the tactile and the kinesthetic, the essence of experience, a review of Dewey's thinking provides support for integrating experiential learning into the classroom.

Dewey's best statement on the value of experience comes from his 1938 Kappa Delta Pi lectures entitled Experience and Education, although statements regarding the importance of experience can be found in other works. [1] Dewey argued a philosophy which puts the individual's experience at the center of learning: "I assume amid all the uncertainties there is one permanent frame of reference: namely, the organic connection between education and personal experience; or, that the new philosophy of education is committed to some kind of empirical and experimental philosophy."[2] Dewey articulated the overall progressive philosophy later in life, in response to the Progressive Educators who had formally adopted seven principles.[3] By the 1920s, progressive educators had taken Dewey's principles into practice as

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[1] John Dewey, Experience and Education (New York: Collier Books, 1963).

[2] Ibid, p. 25.

[3] Herbert M. Kliebard, The Struggle for the American Curriculum, 1893-1958 (New York: Routledge, 1987), p. 191. These were: 1) Freedom to develop naturally; 2) Interest, the motive of all work; 3) The teacher a guide, not a taskmaster; 4) Scientific study of pupil development; 50 Greater attention to all that affects a child's physical development; 6) Cooperation between school and home to meet the needs of a child's life; 7) The progressive educator as a leader in educational movements.

they saw fit. Dewey had difficulties with the organization's advocacy of freedom and excessive child-centeredness and frequent lack of theory and planning.[4] The Progressive Educators' statement of principles in 1930 confirms the reasons for Dewey's resposne : "The curriculum should be based on the nature and needs of childhood and youth, with the ideas of acquiring knowledge as far as possible through the scientific method of first-hand observation, investigation, experiment, and independent search for material."[5] While this platform promoted the Dewey's ideal of experiential education, it ignored the role of the adult. Dewey in "Progressive Education and the Science of Education" (1928), stressed respect for the individual student and for self-initiated and conducted learning as well as respect for activity as the stimulus to learning. But Dewey saw all interaction taking place within an "all-enveloping medium" of social interaction of student, instructor, and community.[6] Progressive schools then, and now, did have a strong commitment to interaction with community. Dewey's vision included a larger vision of social improvement which relied on frequent interaction of student with surroundings and others in society. [7] This vision of education resembles Vygotsky's.

Dewey linked experience of the self and society in his statements on instructional methodology.

> ...The immediate and direct concern of an educator is then with the situations in which interaction takes place. The individual, who enters as a fac tor into it, is what he is at a given

[4] Kliebard, p. 191-3. See also Dewey's "Progressive Education and the Science of Education" (1928) which says much the same thing. In Stephen I. Brown, Mary E. Finn, eds., Readings from "Progressive Education": A Movement and Its Professional Journal, Vol. I (Lanham, MD: University Press of America, 1988), 160-161.

[5] Brown and Finn, 41.

[6] Martin Dworkin, ed., Dewey on Education: Selections (New York: Teachers College Press, 1959), p. 115-116. Dewey also makes the point about socialization in Experience and Education.

[7] This may even be reminiscent of his philosophical roots,as Dewey 's initially was Hegelian. I am reminded that Karl Marx borrowed from Hegel and that Marx's vision of history was profoundly evolutionary, and much Victorian thought was predicated on evolutionary schema, especially those emphasizing the "search for order" (the last phrase is from historian Robert Wiebe who studied the Progressive Era in the book of the same title). The reference to Hegel is found in Arthur C. Wirth, John Dewey as Educator: His Design for Work in Education, 1894-1904. (New York: John Wiley and Sons, 1966), 13.

> time. It is the other factor, that of objective conditions, which lies to some extent within the possibility of regulation by the educator. As has already been noted, the phrase "objective conditions" covers a wide range. It includes what is done by the educator and the way in which it is done, not only the words spoken but the tone of voice in which they are spoken. It includes equipment, books, apparatus, toys, games played. It includes the materials which an individual interacts, and, most important of all, the total social set-up of the situations in which person is engaged.[8]

Or, as Dewey writes in an earlier section of Experience and Education, "we live in a world of things and of persons."[9] The authentic person comes from interactions with objects and others. But while these experiences are spontaneous in their connection to the person, and generative because they are planned, these experiences do not just happen. Indeed, it is the guiding of these experiences that is the very stuff of education.

> ...there is incumbent on the educator the duty of instituting a much more intelligent, and consequently more difficulty, kind of planning. He must survey the capacities and needs of the particular set of individuals with whom he is dealing and must at the same time arrange the conditions which prove the subject-matter or content for experiences that satisfy these needs capacities. The planning must be flexible enough to permit free play for the individuality of experience and yet firm enough to give direction towards continuous development of power.[10]

While progressive education is student-centered, it must also be structured.

Dewey and History

A useful example of Dewey's educational philosophy of experience can be seen in his arguments about and applications of history instruction. According to

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8 Dewey, Experience and Education (1938, 1963), 45.
9 Ibid, 41.
10 Ibid, 58.

historian Herbert M. Kliebard, Dewey saw history as "social history rather than a rendering of events".[11] At the University of Chicago, Dewey was able to create a learning laboratory for students and faculty. There students learned in a curriculum structured around the sequence of "the way human beings gained control of their world through the use of intelligences-- stages in the development of knowledge."[12] This meant that students followed a sequence of history that generally recapitulated the development of Western Civilization, but with an special emphasis on the "psychological" aspect, i.e., how it felt and what it meant to be part of a social group that had to cooperate. The practice had roots in Dewey's 1897 "My Pedagogic Creed":

> I believe that history is of educative value in so far as it presents phases of social life and growth. It must be controlled by reference to social life. When taken simply as history it is thrown into the distant past and becomes inert. Taken as the records of man's social life and progress it becomes full of meaning.... the only way to make the child conscious of his social heritage is to enable him to perform those fundamental types of activity which make civilization what it is.[13]

To achieve these goals, history, geography, and science were melded together in the process of inquiry. Students were to "experience" history for themselves and then connect their experience to the larger social development. For example, when the American colonial period was studied

> ...new kinds of materials were introduced-- tools, household utensils, food, etc.-- that applied to the modes of living of the explorers and colonists under study. Children could reproduce and get "the feel" of conditions they discussed rather than just talk about historical information. This was supplemented by

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11 Kliebard, Struggle for the American Curriculum (1987), 76.

12 Ibid., 84.

13 Dewey in Dworkin, Dewey on Education (1959), 24-25.

by the innovation of dramatic reenactments.[14]

Dewey's focus was on supplying an environment of "materials, appliances, and resources-- physical, social, and intellectual".[15] This not only links the individual to society, but also achieved its goals in such a way as to actually interest the student. Experience would capture the imagination of the child, and in so doing, free her from the confines of the inauthentic, boring school experience that Dewey found typical.[16] Progressive educators frequently spoke of this desire to revitalize student participation and interest in their own learning.

For Dewey-- and for other progressive educators-- educatotion had to be active, student-centered, and connected to experience. Dewey would maintain a slightly different stance from the bulk of progressive educators of the 1920s and 1930s in his insistence on the student experience connecting to a larger sense of social order. These curricular principles were not only true of the study of history. They could be applied to other areas of inquiry. As Dewey himself would later say, "the inescapable linkage of the present with the past is a principle whose application is not restricted to the study of history."[17] Dewey followed this statement with an example of his principles applied to the study of science. In many ways, Dewey championed interdisciplinary content and multiple learning style methodology.

Dewey's Successors

What followed Dewey's work? As Herbert Kliebard and Lawrence Cremins describe, progressive education waned with the advent of the Cold War and a new

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14 Wirth, John Dewey as Educator (1966), 105-6.

15 Dewey, "Interest and Effort in Education" (1913) in Wirth, 96.

16 Dewey had a great deal to say about boredom and the waste of individual potential in school. See Dewey, "School in Society: Part III-- Waste in Education" (1900) in Wirth, 76-77 and Dewey, Experience and Education, on the "brutal features" of traditional education (26-27).

17 Dewey, Experience and Education, 79.

sets of educational reforms. It did not help that Dewey's writings can seem inpenetrable to his followers then and now. Many of the progressive schools established in Dewey's era no longer exist or have modified their mission. There seems to be some confusion as to the nature and purpose of progressive education in the 1990s. For schools in general, there have been trends in experiential education. In the 1970s there was an emphasis on the "democratic classroom." [18] In the 1960s - 1980s, cognitive scientists like Jerome Bruner and David Kolb linked theories of human learning to Dewey's principles. Jerome Bruner has written extensively about the "spiral of learning". David Kolb extended Dewey's ideas into a theory of learning as a process in which concepts are derived from and modified by experience. Kolb's four stages of development mirror Dewey's emphasis on experience: 1) concrete experience, 2) observation and reflection, 3) formation of abstract concepts and generalizations, 4) testing the implications of these concepts in new situations.[19] Each new experience would case another cycle of reflection.[20]

Dewey's ideas exert considerable power on his successors. Howard Gardner argues for "cognitive apprenticeships" as a form of structured experiential learning that will also appeal to multiple intelligences and cognitive science.[21] In curricular reform today, the most singular effort that relies on Dewey's philosophy is constructivism.[22]

Constructivist education relies on a student-centered approach which takes as its curricular starting point the student's own interest and experience. Constructivist

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18 For example see Muriel Schoenbun Karlin Regina Berger, Experiential Learning: An Effective teaching Program for Elementary Schools (West Nyack, NY, Parker Publishing Co., 1971).

19 Kolb, Experiential Learning: Experience as the Source of Learning and Development (1984) cited in Richard Joseph Hamilton, "On Experience: A Critical Review of the Relationship between Experience and Adult Learning", Ed.D. Dissertation, Teacher's College, 1992, 107, 75. Kolb also cited in David Bond, Rosemary Keogle, David Walker, eds., Reflection: Turning Experience Into Learning (London: Kogan Page, 1985), 12

20 This is somewhat different from Bloom's taxonomy, which is very linear in its presentation.

21 Anthony DeFalco, "The Learning Process, Apprenticeships, and Howard Gardner", Journal of Cooperative Education 30:2 (Winter 1995), 56-67.

22 For an overview of the variety of programs, see Rebecca L. Carver, "School Reform based on Experiential Education: What Does It Mean and Why Does It Matter?" (ERIC: April 1995), #ED3866449.s

education's principles sound familiar. They are from Dewey and Piaget and have been spurred by the interest in learning styles and multiple intelligences theories. One of the best statements of "learning from experience" defines the propositions which frame constructivist learning:

1) Experience is the function of, and stimulus for, learning
2) Learners actively construct their own experience
3) Learning is a holistic process
4) Learning is socially and culturally constructed
5) Learning is influenced by the socio-emotional context in which it occurs.[23]

Experience builds upon itself. It is the teacher's job to create experiences which will actively engage the learner. Learning's holism is tripartite-- affective (emotional), cognitive (cerebral), and conative (action-based)-- in a division that is reminiscent of Bruner's divisions and the major learning styles presented above. The resulting curriculum is interdisciplinary, for experiences themselves cannot be separated and they are connected to life itself. Curriculum itself is designed around "essential questions" which guide the earner's explorations into the topic. Learning is social. The resulting assessment will be varied. And, student interest and involvement will increase because a constructivist curriculum "free(s) students from the dreariness of fact-driven curriculums and allow them to focus on large ideas."[24] While the authors of this particular statement cited Piaget as a primary force in the shaping of constructivist educational theory, and most constructivists do cite Piaget as their intellectual forbearer,[25] we certainly hear echoes of Dewey here.

Constructivist education can be seen at work in a number of fields. The most recent and well-known is the flowering of math and science constructivism. This may

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[23] "Introduction: Understanding Learning from Experience" in David Bond, Ruth Cohen, David Walker, eds., Using Experience for Learning (Buckingham, England: Open University Press, 1993), 8-9.
[24] Jacqueline Grennon Brooks and Martin L. Brooks, In Search of Understanding: The Case for Constructivist Classrooms (1994), 22.
[25] Nel Noddings, Philosophy of Education (Boulder, CO: Westview Press, 1995), 115-6.

be in part because of the nature of Piaget's research which, later in Piaget's career, focused heavily on description of logical and mathematical thinking.[26] The best example of current constructivism is the National Council of Teachers of Mathematics' "Standards" which emphasizes the use of concrete examples in the classroom, even at the secondary level. Other fields which urge constructivist experiences are art education (which seems to be essentially experiential anyway), athletics, and outdoor education. Apprenticeships, outdoor farm/living history museums, and childrens' museums also stress experiential education. All of these fields stress experiential education in one form or another.

Like constructivist educational philosophy, these ventures seek to recreate experience, build understanding, stimulate interest and foster generative learning. In essence, Dewey's goals are reached through these "participant observation" experiences. Classroom instructors can learn from these other activities.

Now's a good time t o take a break. Better yet, go for a jog and then return to this page.

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[26] For example, see John R. Staver, "The Constructivist Epistemology of Jean Piaget; its Philosophical Roots and Relevance to Science Teaching and Learning" (conference paper, Sept. 1986), available through EDRS (ED278563).

CHAPTER THREE: HISTORY TODAY

> History is first and foremost about people and the various expressions--material, spiritual, social, economic, aesthetic, behavioral-- of their cultures for a given time and place.[1]

> [History is] a process of constructing, reconstructing, and interpreting past events, ideas, and institutions from surviving or inferential evidence in order to understand and make meaningful who and what we are today. The process involves dialogues with alternate voice from the past itself, with the recorders of the past, and with present interpreters. The process also involves constructing coherent, powerful narratives that describe and interpret the events as well as skill analysis of quantitative and qualitative information, from a theoretical perspective.[2]

The current state of United States History

History as a discipline has come under critical examination for a variety of reasons.

Since the 1986 "Nation at Risk" report considerable concern has been expended in reviewing the state of U.S. education. History has been no exception. One of the most influential works has been How Much Do Our 17-Year-Olds Know?, a review of achievement in social studies.[3] Seventeen-year-olds did not know much about historical content or thinking process. More recently, the 1994 National Assessment of Educational Progress has tested the history knowledge of students in

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1 Vanderstel, 24

2 Gaea Leinhardt, "History: A Time to be Mindful" in Gaea Leinhardt, Isabel L. Beck, and Catherine Stainton, eds., Teaching and Learning in History (Hillsdale, NJ: Lawrence Erlbaum Associates, 1994), 251.

3 Diane Ravitch and Chester E. Finn, Jr., What Do Our 17-Year-Olds Know?: A Report on the First National Assessment of History and Literature (New York: Harper and Row, 1987).

the 4th, 8th, and 12th grades. While private school students performed better than their public school counterparts, no more than two percent of the total at any grade achieved the highest level.[4] These test scores become a disheartening fact in view that the eleventh-grade United States History survey is often the first chance all U.S. students have at true historical analysis and often the last course they all take.

Most of these courses have been based on the survey textbook. Reviewers consistently have found history textbooks to be lacking[5] . One consistent problem has been content, either for accuracy[6] or inclusion of certain historical topics. Another problem has been readability.[7] Perhaps most startling is the lack of creative analytical historical thinking that these textbooks produce in the students who read them. A recent examination of students' reactions to their United States history textbooks confirmed that students shared the same complaints about textbooks as the adult reviewers, except for one startling result. Seventy-one percent of the teenagers surveyed said that at best their textbooks were merely collections of fact, and at worst these books provided no explanation why events occured and how they were connected.[8] Students found the contents lacking in significance statements and analytic thought. Textbooks are not modelling higher order historical thinking!

Because national history courses are supposed to be all things to all people,

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[4] Morton Keller, "'The Sky is Falling!' or 'What Else is New?'", History Matters! 8:4 (December, 1995), 1.

[5] The first major work in this area was Frances FitzGerald's America Revised (1979). Since then, numerous reviews have been published. One that takes a more conservative approach (in its emphasis on civics) is Paul Gagnon, Democracy's Half-Told Story: What American History Textbooks Should Add (Washington, DC: American Federation of Teachers, 1989). The best overview of the arguments over U.S. history textbooks is in Jack Zevin, Social Studies for the Twenty-First Century: Methods and Materials for Teaching in Middle and Secondary Schools (new York: Longman, 1992), 280-281.

[6] Either in general-- James Loewen, Lies My Teacher Told Me -- or for specific topics: Native Americans, Jean-Marc Juhel, Klingenstein Fellows Project, 1996; labor history, Dorothy Sue Cobble and Alice Kessler-Harris, "The New Labor History in American History Textbooks", Journal of American History, 79 (March 1993), 1534-1562.

[7] M.P. Dunleavey, "Reforming the 3 R's: Blueprints for the Schools of Tomorrow", Publishers Weekly 241 (February 21, 1994) 33-35.

[8] T. Epstein, "*America Revised* Revisited: Adolescent's Attitudes toward United States History Textbooks" Social Education 58:1 (1994) 41-44.

there have been conflicts over content. The U.S. History curriculum's "canon" has been as fiercely debated as that of literature, perhaps more so. As history is supposed to be both "truth" and the reflection of the peoples involved, the question of "whose history for whom?" bedevils curriculum design.[9]

As for actual history instruction, it remains pretty much the same. Students read textbooks, sit in desks arranged in rows, write essay tests, and complain that history is boring. There is little connection between the work done by university professors and high school instructors.[10] Classroom instructors seem to labor under the impression that they must lecture because "that's what the students get in college." History instructors, like most teachers, deliver material in the manner that best fits their past experience or personal learning style.[11] Classroom instruction usually ignores experiential learning and, as a result, fails to connect real life to the material taught. As a result, students, especially haptic learners, miss the opportunity to connect themselves to the history.[12]

Something needs to be done.

Proposed Solutions: History Standards

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9 Paul Gagnon, Atlantic Monthly (November, 1988); John Elson, "History, the Sequel (National Standards for United States History), Time 144 (November 7, 1994), 64.

10 Joyce M. Cruse, "Practicing History; A High School Teacher's Reflections" Journal of American History 81 (December 1994) 1064-1074; Nicholas Bromell, "What Next? Thought and Action in Intellectual Work", American Quarterly, 47:1 (March, 1995), 102-115. Bromel wants to connect researchers to practitioners; he also sees thinking as an "extension of experience" (105).

11 Ronald W. Evans, "Educational Ideologies and the Teaching of History" in Leinhardt et al., Teaching and Learning in History, 171-207; Gary D. Fenstermacher and Jonas F. Soltis, Approaches to Teaching (New York: Teachers College Press, 1986); Nancy Kroonenberg, "Learning Styles and Language Learning"; Larry Cuban, How Teachers Taught: Constancy and Change in American Classrooms, 1890-1990 (New York: Teachers College Press, 1993).

12 Thomas L. Dynneson et al., "Can Student Perceptions Be Used to Improve Citizenship Education?", International Journal of Social Education 9:1 (Spring/Summer 1994), 98-104. The authors find that social studies courses do not connect students to civics, even though research indicates it would increase their citizenship participation. Computers are making an impact in school history instruction, but to what effect? See Howard D. Mehlinger, "History Teaching and the Magazine of History: A Janus Perspective", The Magazine of History 10:1 (Fall 1995), 9-12.

Since the poor student performance on national history assessments, concerned historians and educational reformers have attempted to do something. The solution has come in the form of history standards. Unfortunately, the historical community's multiple perspectives on the content of United States History surveys has been a bone of contention. For a teacher seeking examples of how to use material culture and experiential history in the United States history curriculum, the final result presents little concrete assistance.

The subject matter of the United States History survey has changed over the past twenty years. Since the New Social History of the 1960s, high school curriculums have made more emphasis on diverse social groups and their experiences, rather than "wars and bores". The historiography and original monographs on women's history, African-American history, ethnic studies, labor history has multiplied rapidly. The work of Linda Gordon on social welfare or Ronald Takaki on ethnic perspectives provides excellent examples of the new New Social History. This historiographic shift has been resisted by those seeking continuity and quality in history instruction.[13] The U.S. history equivalent of E.D. Hirsch has been expressed in the opinions of Arthur Schlesinger, Jr. and others who bemoan the loss of common ideals in the content of U.S. history and in the nation as a whole. As a result, the creation of "National History Standards" has been fraught with contention.

The final result of the search for standards is the National Standards in United States History produced by the National Center for History in Schools at UCLA.[14] The authors emphasize chronological and thematic presentation, analysis as well as narrative, current events connections and personal relevance, and "doing good history" (ie., maintaining the disciplinarity of the subject). The goal is clearly to

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13 "The Debate Over National History Standards", The Historian 57 (Winter 1995), 449-469.

14 National Standards for United States History (5-12): Exploring the American Experience (Los Angeles: National Center for History in Schools, 1994).

produce students who are not only well-grounded in the facts of U.S. history but who are also proficient in analytical historical thinking. The report lists five types of historical thinking: chronological thinking, historical comprehension , historical analysis and interpretation, historical research capabilities, and historical issues-analysis and decision-making. These standards do represent higher order thinking. As the Standards state, "The study of history is not only remembering answers. It requires following and evaluating arguments and arriving at usable, even if tentative, conclusions based on the available evidence."[15]

Uniformly, these standards ignore experiential learning and material culture. There are two exceptions. "Standard 2: Historical Comprehension" prods students to comprehend a variety of historical sources. These sources include documents and narratives, historical maps, visual/mathematical/quantitative data, material culture, and visual/literary/musical sources; the goal of each is the knowledgeable use of each type of evidence. "Historical Comprehension" also states as a goal the desire to have students

> E. **Appreciate historical perspectives** -- (a) describing the past on its own terms, through the eyes and experiences of those who were there, as revealed through their literature, diaries, letters, debates, arts, artifacts, and the like; (b) considering the historical context in which the event unfolded-- the values, outlook, options, and contingencies of that time and place; and (c) avoiding "present-mindedness" judging the past solely in terms of present-day norms and values.[16]

The other area where mention of material culture appears is "Standard 4". "Historical Research Capabilities" highlights the need to question textbooks as a

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15 National Standards in United States History, , 64.

16 National Standards in United States History, 64

source of evidence. This standard expects that teachers will provide students "with documents or other records beyond materials included in the textbook" to "allow students to challenge textbook interpretations, to raise new questions about the event, to investigate the perspectives of those whose voices do not appear in the textbook accounts, or to plumb an issue that the textbook largely or in part bypassed."[17] Like the other standards, however, "Historical Research" ultimately confines the study of history to its traditional domain: reading and writing. The first and second sub-standards indicate the attempt to be inclusive and the ultimate return to the traditional sources:

> *Therefore, the student is able to:*
> A. **Formulate historical questions** from encounters with historical documents, eye-witness accounts, letters, diaries, artifacts, photos, historical sites, art, architecture, and other records from the past.
> B. **Obtain historical data from a variety of sources,** including: library and museum collections, historic sites, historical photos, journals, diaries, eyewitness accounts, newspapers, and the like; documentary films, oral testimony from living witnesses, censuses, tax records, city directories, statistical compilations, and economic indicators....[18]

Compared to earlier formulations of history standards, such as the Bradley Commission on History in the Schools or the National Council of Social Studies, these "California standards" are expansive in their inclusion of material culture. Certainly, the creation of the standards is a mighty project. The sections quoted above, however, are the only mention of material culture sources in the entire document. Nothing is written about experiential education as an instructional methodology. Thus, for our purposes, history instruction as described in the Standards falls short of its potential.

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[17] National Standards in United States History, 67.
[18] Ibid, 68.

The Advanced Placement United States History Curriculum

The challenge of this project has been to create a material culture curriculum for the most difficult example of the secondary school history curriculum: the Advanced Placement course. The "purpose" of the Advanced Placement U.S. History course is:

> to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials-- their relevance to a given interpretive problem, their reliablity, and their importance-- and to weigh the evidence and interpretations presented in historical scholarship. An Advanced Placement United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format.[19]

Thus, the high school student receives historical training which emphasizes both content and cognition.

Content is broad. For those seeking to use artifactual history, an emphasis on social history is helpful, although economic, technological, and cultural analyses also will suit. The question of what content to present lies squarely with the instructor, although student interest should be a powerful factor, for constructivist and practical reasons. Undoubtedly, the class will need to emphasize some things more than others. The typical AP U.S. History course focuses on the nineteenth and twentieth centuries, and emphasizes political, economic, and social history and international relations.

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[19] The College Board, "Advanced Placement Course Description: History" (CEEB/ETS, 1995), 1-2. This course description is also known as "the acorn book." I also write from long experience-- I have taught AP for seven years and will be serving as a reader in the summer of 1996.

The skills assessment of the Advanced Placement exam is designed to test students' historical thinking. Students must answer eighty analytical multiple choice questions (a few featuring cartoons or art, charts, graphs, or tables-- no concrete objects here) for 50% of the test score. The other half of the test scores relies on the results of three essays: one document-based question, based on historical research and analysis with roughly eight preselected documents (up to two of which may be visual), and two short essays, one from two questions before 1860s and one from two questions after 1860s. The student has three hours in which to complete this task. For the student who is a haptic learner it can be daunting.

The Advanced Placement United States History exam emphasizes analysis and synthesis. It also stresses reading and writing production. The appropriateness of the task itself, as representative of historical methodology and of sound educational goals, has been debated. Certainly the Educational Testing Service (ETS), the progenitor of the test, is not deaf to these criticisms and the educational trends. Currently, ETS has a curriculum development project underway; their goal is to create an interdisciplinary course and assessment.[20]

In the meantime, the teacher must balance content and analytic thinking skills training. Probably the most difficult part of teaching Advanced Placement United States history is the time pressure: students are expected to have "covered" all of U.S. history from Native American cultures and pre-Columbian contact to current events by the exam in mid-May. For independent school, which usually take healthy holidays mid-winter and spring, this means losing time before the exam and having class time remaining after the test. Some schools do not have an explicit AP course and the time factor is not so much an issue; students themselves decide when and how to take the test, usually as seniors rather than juniors. A few schools divide the course over two

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20 Robert Rothman, Measuring Up: Standards, Assessment, and School Reform (San Francisco; Jossey-Bass, 1995), 121, 127-128; Heidi Hayes Jacobs, personal communication, November 5, 1995.

years, but most attempt to complete the task within one year.

While it may be tempting to reject the whole enterprise, and some schools have, there are a variety of reasons to attempt this challenge. Ultimately, working on an AP course can be tremendously rewarding for both student and teacher. History fascinates people for a variety of reasons and many Advanced Placement student enter the course with a deep appreciation for the questions of history (i.e, an appreciation of significant events and causality). The course itself can be a vehicle for improvement of higher order thinking as well as inculcation of factual knowledge and study skills. Given the realities of independent school education as a vehicle for college preparation, the course is desirable and usually students and their parents demand it. Some of the most eager and earnest history students are, however, haptic learners. How can we encourage success for these haptic learners and leave all students with a love of the subject and the means to continue study on their own?

Chalk and talk... or walk the walk?

To promote the learning of history through haptic means seems to fly in the face of conventional wisdom. As the previous sections show, there is good pedagogical and discipline-based reasoning to do so, however.

Classroom instructors who are cognizant of their effect on students and desire to construct a learning environment know that a variety of teaching techniques aimed at a variety of learning styles will produce success. Based on the background presentation of the previous chapters, what follows is proposed methodology for "haptic history".

Before you read further, you may want to take the "Acorn Book" out of the box and flip through it.

CHAPTER FOUR: HAPTIC IN HISTORY

Entry Points into Haptic History in an A.P. Curriculum

Howard Gardner in The Unschooled Mind defines five "entry points to learning." These entry points are narrational, logical-quantitative, foundational (philosophical and terminological), aesthetic (sensory), and experiential approaches. In explaining the experiential approach, Gardner writes, "Some students-- old as well as young-- learn best with a hands on approach, dealing directly with the materials that embody or convey the concept."[1] He makes this assertion after debunking stereotypes and sloppy thinking encountered in school. The "stereotypes" encountered in history feature "a simple fact-script-and-personality view" which often leave students unable to "relate history to the lives of ordinary individuals, let alone their own" and unable to "appreciate how the particular of everyday life are fashioned (by yet other flesh-and-blood individuals called historians) to form the fabric of history."[2] But the goal of history instruction at the secondary level, especially Advanced Placement classes, is to provide an analytical understanding of the particular and the general.

As we have seen, "haptic" can mean "moving and doing" as it combines tactile with kinesthetic learning. With that in mind, let us explore three ways Advanced Placement United States history can connect with the haptic learner: through cooperative learning and kinesthetic exercises, through material culture analysis (via "inductive" , "deductive", and "symbolic" approaches), and through the use of artifacts as writing aids.

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[1] Howard Gardner, The Unschooled Mind: How Children Think and How Schools Should Teach (new York: Basic Books, 1991), 246.

[2] Gardner, The Unschooled Mind, 174, 175.

history classroom.[7] Students are grouped in equal numbers of small groups. Information, such as a chapter from a book or one of a series of historical documents, is distributed in the classroom. The number of documents and the number of groups should match, In their groups, students read and discuss their information and decide how best to disseminate it to others outside their group. Then the members of the group leave their original group and form new small groups. The new small groups will have one member of each original document groups. The individuals in each group must then teach the rest of the group about their document and then the group as a whole synthesizes the information. This method works well when presenting multiple viewpoints on historical events or issues.

Another cooperative learning method, sometimes referred to as "peer collaboration", is "think-pair-share."[8] Students are asked to consider an issue, document, or object. Then they partner a peer and briefly summarize their thoughts to the other student. The following discussion can be by the pairs or the class as a whole. This method works well as a brief introduction or as a summary to class activities.

All of these cooperative learning methods can be applied in any classroom. There are some "learning by doing" exercises which have been developed specifically for the history classroom. These include cooperative learning strategies of role play simulations, debates, response groups, interactive slide lectures, oral history projects,

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[7] David Perkins in Smart Schools refers to jigsaw several times as an example of "distributed intelligence". This method has been modeled by Jackdaws, a historical document activity company. Jackdaws contain a variety of documents all on the same topic. The reader is expected to synthesize the variety and reach an historical analysis.

[8] Perkins refers to the distinction between cooperative learning and peer collaboration than some researchers make. David Perkins, Smart Schools, 64. I have been using think-pair-share for so long, I cannot remember where I learned it.

field trips, and create a museum. Curriculum examples abound.[9] All of these emphasize the use of historical content in a cooperative or kinesthetic setting.

An extension of experiential learning goes beyond the classroom. Howard Gardner promotes "cognitive apprenticeships" as opportunities for students to see the application of their content knowledge in an immediate setting. Such an apprenticeship allows the student to benefit from the mentor's expertise; this social learning harkens back to both Piaget's and Vygotsky's theories. While high school history apprenticeship seems rare, there is one excellent example. James A. Percoco's "Applied History" provides students "one semester to learn about historiography, museum studies, the world of archives, and other topics. This classroom experience [is] followed by a spring semester internship at a local museum, historic site, or museum property."[10] Museums welcome the students as interns and students welcome the course. Percoco explains, "The Applied History course is attractive because it is hands-on."[11] This is precise the sort of apprenticeship Gardner describes and Jacobs encourages secondary instructors to use; it involves students with real-world experience that encourages adult independence of action and thought. It is definitely haptic history.

For social sciences, much of the curricular emphasis on developing experiential learning has been on the younger grades. This has led to some truly creative and interesting results. It has also created a popular perception that use of these techniques in a "upper level" classroom is immature and inappropriate, especially in the "college preparatory" curriculum. I argue with this point of view. If the topic

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[9] See Bert Bower, Jim Lobdell,a nd Lee Swenson, History Alive!: Engaging All Learners in the Diverse Classroom (Menlo Park, CA: Addison-Wesley Publishing Co., 1994) or Jack Zevin, Social Studies for the Twenty-First Century: Method and Materials for Teaching in Middle and Secondary Schools (New York: Longman, 1992) for examples. Also, most state or regional social studies conferences present workshops on cooperative learning which are worthwhile to attend.

[10] James A. Percoco, "An Applied History Course: Cruising with Clio Car", History Matters! 8:6 (February 1996), 1, 5. Percoco teaches at West Springfield H.S., 6100 Rolling Road, Springfield, VA 22152.

[11] Ibid.

selected and the questions asked as analytical in nature, the grounding of the learning in kinesthetic experience should only enhance the learning.

Uses of material culture

> When the old farmer first saw the giraffe, he declared, "There ain't no such animal." Historians tend to a similar cast of mind. They seem willing to believe almost anything as long as it is not three-dimensional.[12]

We have seen that students need to develop literacy of many types, visual literacy not the least of them.[13] Artifactual literacy is another necessary quality. How to do this?

Material culture has various definitions. One of the most succinct is borrowed from James Deetz, from himself had borrowed from and been inspired by folklorist Henry Glassie: material culture is "that segment of man's physical environment which is purposely shaped by him according to culturally dictated plans."[14] Material culture, for most members of this group, are the "humbler objects of everyday life" (which usually have been neglected).[15]

Thomas Schlereth's work on material culture provides the most comprehensive analysis of the field of study. He has written a compendium to material culture study in the United States.[16] In this historical scheme Schlereth describes three historical

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[12] John T. Schlebecker "The Use of Objects in Historical Research" in Thomas J. Schlereth, ed. Material Culture Studies in America (Nashville, TN: American Association for State and Local History, 1982), 107.

[13] Paul Messaris, "Visual Literacy and Visual Culture", conference paper (1995), EDRS 380062

[14] Deetz from Small Things Forgotten quoted in Thomas Schlereth, "History Museums and Material Culture" in Leon and Rosenzweig, 294.

[15] Harold Skramstad, "American Things: A Neglected Material Culture" in Robert H. Walker, ed. American Studies: Topic and Sources (Westport, CT: Greenwood Press, 1976), 185-193.

[16] Thomas Schlereth, "Material Culture Studies in America, 1876-1976" in Thomas J. Schlereth,ed. Material Culture Studies in America (Nashville, TN: American Association for State and Local History, 1982), 1-75.

stages of material culture study: collection, description, and interpretation. Schlereth sees two modes of material culture interpretation, functionalist (what is it? What did it do?) and cultural-reconstructionist (What does it means? Why was it made? What were people thinking when they designed and used such things?). Or,as another folklorist puts it, the objects has two functions: it is unique in itself and it can tell us about the context in which exists.[17] The methodology for material culturists is necessarily comparative:

> In their background preparation (and sometimes in their exhibits) extensive documentary, statistical, and especially archaeological evidence is usually examined before an interpretative framework is articulated. This analysis is revised as new data become available.[18]

Thus, the analytical thinking required in an Advanced Placement history course would be encouraged through the use of the material culture analysis.

In our use of material culture resources we are seeking to use these sources like any other "traditional" documentary source. Artifacts must provide "windows and mirrors" to another people in another time and place as well as on those who are holding them.[19]

How to select and use artifacts? There are two criteria for selection: availability of resources, actual and historical, and the "representativeness" of the object selected.

The actual resources available to the instructor will vary with that person and their location. Budgets, region, locale and student interest will all vary. It is most

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[17] John F. Moe, "'They Sang to My Eye': A Humanistic Approach to the Study of Material Artifacts," The International Journal of Social Education, 1:1 (Spring, 1986), 37-54.

[18] Schlereth, "History Museums and Material Culture" in Leon and Rosenzweig, 308.

[19] This phrase is borrowed from Emily Style.

suitable to use object to which people will already have some connection-- personal or cultural. But that is not to deny the utility of things that are new and different to the audience ("windows"). New experiences that bring insights are necessary. It becomes even more important for the instructor to have enough background to explain these objects, especially if they are unique to the class audience.

"Representativeness" of an artifact results from historical interpretation. To fully determine if an object is representative, considerable review of the secondary literature on the time period and the type of object should be performed. The object chosen could be representative of a historical concept in one of two ways: either as a time and place specific item or as a symbol of a historical concept. Which representation remains to be chosen by the student and the instructor, in consultation with the historical research.

Objects tell you what you ask of them.[20] Each discipline mentioned above asks different questions of the object. One group sees objects as "Social documents of a larger material culture"[21] The other thinks that this vew is too "passive" and that artifacts are "active instruments in the creation and perpetuation of culture."[22] In other words, artifacts merely reflect culture or they help to create views of the world. Schlereth groups material culture study into simialr typologies. His overview of scholarly approaches to material culture evidence produces two approaches: synchronic analysis, "a descriptive study of objects without reference to timeduration or cultural change", and diachronic analysis, "a comparative study of objects as historical

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20 A point well made in William Hesseltine's thought-provoking essay in Schereleth Material Culture Studies in America. Hesseltine's 1957 paper when delivered "proclaimed that the consensus of experts in historical methodology was that artifacts were best illustrative rather than instructive" says James William Miller in "Museums and the Academy: Toward Building An Alliance" in Journal of American Culture, 12:2 (Summer, 1989), 1. If one reads to the end of Hesseltine's essay, the conclusion is really more of a query on how to use objects rather than a flat statement. Miller's point is that public history's active use of material culture studies has "eroded skepticism" about the use of the object.

21 David G. Vanderstel, "Humanizing the Past: The Revitalization of the History Museum" , Journal of Popular Culture, 12:2 (Summer, 1989), 19-25, 20

22 James G. Gibb and Karen Lee Davis, "History Exhibits and Theories of Material culture" Journal of Popular Culture, 12:2 (Summer 1989), 27-33, 27. They stress "symbolic manipulation".

data-- that is, as resources that can be considered as being both effects and causes in history."[1]

The question now is-- how shall we put together our view of things?

Here are two views of such a synthesis.

First, an approach from art history. In the Winterthur Museum's method pioneered by E. McClung Fleming in 1974, Fleming proposed five properties (history, material, construction, design, function-- uses and roles) of an object. The person working with an object was supposed to determine these five properties as the first of four operations to be perfromed on that object (identification, evaluation, cultural analysis, and interpretation). [23] Evaluation incorporated relating the object to its craft and aesthetic values and comparison to other objects. Cultural analysis included a look at the iconography of the object (its symbolism) to see what meanings were encoded within it. Interpretation meant looking for significance. These elements provide a clear format, but they appear in a context that takes the object primarily on its own terms. In essence, the object is glorified, and thus becomes art. This provides the antithesis of the archaeological method of "battleship curves" (as seen in Deetz), with its emphasis on determining types over time which so contextualizes the object as to lose any uniqueness, and therefore historical significance, to it.[24] A similar approach comes from another Winterthur successor, Jules David Prown. Prown presents material culture method in three parts: 1) Description-- substantial analysis, content, formal analysis (ie., aesthetics); 2) Deduction-- sensory engagement,

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[23] E. McClung Fleming, "Artifact Study: A Proposed Model", Winterthur Portfolio (1974), 153-173.

[24] To be fair to Deetz, in practice he does more than this. But if one takes In Small Things Considered by itself one would reach this conclusion. Such is the result of . Another example, coming from the art world, of the use of typology over time is Craig Gilborn, "Pop Pedagogy: Looking at the Coke Bottle", Museum News, 47:41 (December 1968) 12-18. He maps out the entire history of Coca-Cola bottle design over time. Apparently this article caused quite a stir at the time, but it is nothing new to the archaeologist. The most interesting part of Gilborn's commentary comes at the end of the article when he asks the reader to consider questions about Coke bottles that ask about the sensuous/tactile, psychological, symbolic, ritual, and social contexts of the objects. This, too, is reminiscent of Deetz.

intellectual engagement, emotional response; 3) Speculation -- theories and hypothesis about the object's communication of social beliefs, and research to prove or disprove those theories.[25] Prown connects his view of material culture to art history (stylistic analysis, iconography) and anthropology (quantitative analysis, iconography). More recently, the revised exhibits at Winterthur provide another multiplicity of ways through which to view and understand objects.[26] Today Winterthur has an exhibition entitled "What is an object?" which presents six ways of viewing objects: Change over space; change over time; technique and technology; maker and marketplace; ritual and custom; message and symbol. The goal of the exhibit is to show the multiple meanings of objects while understanding people past and present. But ultimately, the fine art tradition is maintained as the objects are singled out, placed on pedestals, and chosen for their uniqueness and attention to craft. Indeed, the observer can use a computer station to arrange a room and be judged on taste and design.

Another method comes from material culture as used by living history museums. As Barbara G. Carson argues in "Interpreting History through Objects", history is more about people and their ideas, rather than about defining the aesthetic qualities of an object. She argues that the progression of studying an object "should move from things to people and their actions and then to an exploration of ideas about behavior."[27] Carson asks six basic questions of material culture objects:

-- What is this object?
-- What activity was it part of?
-- Who made made/owned/maintained/used the object?
-- How did people work together to make activities happen or achieve the desired result with the object? [This includes cooperation and

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25 Jules David Prown, "Mind in Matter: An Introduction to Material Culture Theory and Method", Winterthur Portfolio, 17:1 (Spring 1982), 1-20.

26 Susan Williams, "The Galleries at Winterthur", American Quarterly, 47:2 (June 1995), 309-329.

27 Barbara G. Carson, "Interpreting History Through Objects" in Ken Yellis, ed., "Interpreting Historic Sites and the Built Environment" Journal of Museum Education: Roundtable Reports 10:3 (Summer 1985), 2-5, 2.

conflict between people.]

-- How have things and people's circumstances and relationships with one another changed from one period to the next?

-- Why [have these changes occurred]?[28]

Carson's approach is widely applicable to both artifacts and people. It is simple and inclusive of a broad range of historical concepts. It can be generative of analytical thought. Carson herself provides a great example. She begins the article by imagining a typical tour guide's speech about a tea service and folding table in a historic house museum. The tea set and table are merely described. After asking the questions above, Carson revises the description to include the social context in which the objects were produced and used (by the servant of the house and the mistress and her friends) with attention to the typicality of such objects and use for that time period. Such a description defines how material culture can be used to provide historical analysis.

Objects in the classroom-- three approaches

Now that we have generative questions, how can a classroom history instructor use material culture artifacts to increase understanding of history? Here are three approaches to that use.

1) "Inductive" Approach -- use of objects as individual items of study

Students, like archaeologists and historians, encounter objects that are new and unknown to them. As a result, this piece of material culture will assume a unique status for students. A critical analysis of the item with Fleming's questions will define

[28] Ibid., 4.

and describe the object. Then students will be asked to asked to place this object in a wider context of its production and use. Additional research may be necessary in order to determine the name, era, and use. The chances of students not knowing what these objects are is high; here is an opportunity to learn about the ways in which history narration works with limited information.

For example, send students out to a flea market or yard sale. Ask them to bring back one thing that interests them (be sure to set a limited budget and provide funds if possible). While they are procuring the artifact, have them note the context in which it is offered for sale and see if they can take a personal history of the object from its seller. In the classroom, each student should introduce their artifact. Then as a group see if there are any themes within the group (historical era, use, ownership patterns). As Csikszentmihalyi and Rochberg-Halton explain, domestic objects function as symbols of the self. The personal histories provided, if any, will provide a psychological profile of the owners who can then be connected to the narrative of history. If the owners' stories are missing, then the objects themselves are the story. They will become significant in themselves. As such, these artifacts will assume uniqueness in the eyes of the viewers and become a vivid reminder of the nature of historical evidence.

Here's an example. Please take Item 2 out of the box. What do you know about it? Use either Flemings or Carson's questions, or the questions provided in Appendix II. When you've exhausted the possibilites-- or yourself-- open the "secret information packet" that came with Item 2.

2) "Deductive Approach" -- use of objects within a thematic context

A deductive approach selects representative items of material culture in order to

trace change over time. Students or teachers should be able to select items that connect to larger themes such as the Industrial Revolution or changes in gender roles. The presentation of this material culture can appear as individual items in defined units over the course of the year, or can be used as a summative exercise to review the pattern of change.

Quilts can provide an insight to changes in both gender roles and technology over time. There is a wealth of information on quilts and quilting. For a summative unit, try combining visits to local craft or art museums or shows with an explanation of how pattern styles and names reflected region and availability of materials. Show the change of names of patterns over time and region ("Log Cabin" of the 1840s became known as "Lincoln Logs" after the 1860s). Have students look at the differences of dyes and materials. The Amish use of color is very distinctive, for example. Aniline dyes did not become available until the late Victorian era, when suddenly fashion demanded clothing in vivid magenta and chartreuse. Crazy quilts became the rage around the same time; often these quilts contained exotic fabrics and pre-made scraps. Such colors and fabric would not have been used in quilts if the fabric technology had not improved weaving and dying methods, or that silk had become less expensive over time. In addition to looking at quilts, have the students read an related historical documents about domestic life. They can watch the video "Hearts and Hands" which summarizes changes over the nineteenth and twentieth centuries. Finally, they can make their own collective quilt to commemorate "American women in History", a technique pioneered by Judy Logan.[29] Personal and historical experience can be connected.

Here's another example. Take Item 3 out of the box. Compare it to the pen in your hand. Now compare it to the computer you use. Think about what you will use for communication in the future. Can you describe a pattern of change over time? What

[29] See "The Story of Two Quilts" and "American Women Making History" in Judy Logan, Teaching Stories(St. Paul: Minnesota Inclusiveness Program, 1993).

has caused these changes? What effects does these changes have?

3) "Symbolic Approach" -- use of objects as memory aids in a cultural context

Sometimes the perfect object is not available. Many artifacts are too large (such as a steam turbine) or too fragile (clothing) or too expensive (antiques and art) to be brought to a classroom. Yet material culture analysis can be performed by viewing pictures and descriptions of the object and by handling models or items that are similar to the cultural history being discussed.

For example, most historians stress the dynamic impact of Eli Whitney's cotton gin on the nineteenth century cotton economy. The original gin sits in Smithsonian Museum, far removed from most classrooms. Alistair Cooke's "America" video series shows Cooke cranking the gin while telling the story of Whitney's idea (watching a cat poke its claws through chicken wire and pulling back only feathers). This presentation appeals to the the visual and auditory learners, but fails to concretize the historical episode. I have found that bringing in several cotton bowls (even long staple cotton) and asking the students to remove the seeds by hand quickly brings them to an understanding of the labor intensive nature of cotton wool production and the revolutionary impact of Whitney's invention. A cotton bowl is a not a cotton gin, and the distinction must be kept in mind, but the proximity of the two anchors the historical significance.

Here's the last example. Take Item 4 from the box. Re-read the above example. Do the example and the item produce a historical understanding for you?

Through these three approaches material culture can be brought to the history classroom. All three techniques should appear to the "haptic historian." What types of material culture can provide easy and fruitful insights into United States History?

The main areas of material culture research, with examples of use

Historical resources are most prolific for the seven areas that are typically the provenance of folklore studies-- architecture, furnishings, tools and technology, foodways, clothing and ornamentation, transportation, and art. Here follows a brief description of considerations for each as well as suggestions as to use.

Architecture

Architecture allows for many means of appreciating culture. Henry Glassie's ground breaking book established a system of classification of architectural styles. While all of this vernacular architecture was located in Virginia, Glassie led the way to see patterns of change over time. Pierce Lewis argues there have been four major tendencies in United States housing:

> 1) Increased regional diversity in house types (and culture) between the Revolution and the Civil War; 2) reversal of this divisive trend after the Civil War, and the rapid spread of national, as opposed to regional, house-types; 3) the prolonged isolation of the South as a distinctive architectural region, long after other regions had joined in the national stream; 4) an increased tempo of architectural innovation combined with an increased tendency to look, paradoxically, backward for architectural reassurance.[30]

[30] Lewis in Schlereth, Artifacts and the American Past, 93-94.

This "battleship curve" of architecture possess a beautiful explanatory elegance. It contains within the pattern major themes of regionalism and nationalism, economic change and the Industrial Revolution, and societal stresses in response to long-term economic changes (something more like Braudel's longue duree of history).

Architecture can reveal social organization, symbolism, psychology of individuals and groups, and social relations.[31]

Archeologists who are wishing to "move towards an archaeology of the mind" see buildings and spaces as embodying social relations, both as reflection and as maintenance.[32] A most intimate and interesting example-- one that is sure to grab the attention of the average adolescent-- is that of the privvy at the Byrd's plantation Westover. It was a formal room, separate from the main house, which contained three seats along one wall (one at the center, and the others angled at the sides) and two seats on a lower bench across. In keeping with Deetz' and Leone's arguments that Georgian architecture codified formalism, archaeologist Martin Hall states "...[visitors] were presented with a statement of symmetry and order [when presented with the front facade of the Westover big house], a lesson that was repeated within the family as the Byrds defecated in rank order."[33] Then again, perhaps "rank ordure" is not the best of topics for a discussion of architecture-- although it is the common site of urban archaeology digs!

Whatever the perspective toward material culture and historical archaeology used, historic houses can be revealing. Thomas Schelerth proposes seven teaching

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31 Denise L. Lawrence and Setha M. Low, "The Built Environment and Spatial Form", Annual Reviews of Anthropology 19(1990), 453-505.

32 Martin Hall, "Small Things and the Mobile, Conflictual Fusion of Power, Fire and Desire" in Yentsch and Beaudry, 373-399. See also John F. Moe, "'They Sang to My Eye': A Humanistic Approach to the Study of Material Artifacts", The International Journal of Social Education 1:1 (Spring, 1986), 37-54; Ken Yellis, Special Issue on Interpreting Historic Sites and the Build Environment, Journal of Museum Education: Roundtable Reports 10:3 (Summer, 1985); Dell Upton, "The City as Material Culture" in Anne Elizabeth Yentsch and Mary C. beaudry, The Art and Mystery of Historical Archaeology (Boca Baton, FL: CRC Press, 1992), 51-74.

33 Ibid, 374.

strategies for teaching with historic house museums and, by extension, architectural resources. These are: 1) house form and types; 2) interior space concepts; 3) furnishings and household artifacts; 4) geographical and ecological relationships; 5) literary and symbolic interpretations; 6) architectural features and styles; and 7) museum interpretation analysis.[34] #4 is one too often ignored, but clearly expresses regionalism within the nation. From personal experience I always know when I am in the Delta South when the houses are one-level brick ramblers with carports (my northern husband on the other hand had never heard of a carport in his life until he met my people). This aspect also refers to landscape architecture, which is another form of humans shaping their environment, literally.[35]

Furnishings

From architecture we naturally move to furnishings. Antique catalogues and buyers guides provide easy access to the desirable qualities of older furniture. Visits to flea markets and auctions can give an easy, tactile appreciation of these furnishings. Even better, visits to furniture showrooms can increase the kinesthetic experience, especially now that Stickley, Colonial, and Eames revivals are simultaneously popular. This visit will also provide the means to compare the old and the new, as style, material, and technology will have changed. One of my favorite examples comes from the catalogs and showrooms of Minnesota-based furnisher Room and Board. While much of their current (1995) line is Arts and Crafts revival inspired, as is appropriate to the Upper Midwest, the lines are more clean and simple than Stickley

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34 Thomas Schlereth, "Historic House Museums: Seven Teaching Strategies" in Schlereth, Artifacts and the American Past (Nashville, TN: The American Association for State and Local History, 1980).

35 Leone has written on this topic in reference to the gardens of Annapolis. I n discussing any rural place it would seem logical to map the patterns of field use and shape as well as look at house pattern books. Field use reveal symbolistic and materialistic thinking. Similarly, there has been enough historical studies of urban parks, especially the work of Frederick Law Olmstead, to look at the meaning encoding within the plan for green spaces as well as to visit them. See Michelle H. Bogart, "Lawns "R" U.S.", American Quarterly, 47:3 (September 1995) 556-562 -- she reviews Virginia Scott Jenkins, The Lawn: A History of an American Obsession (1994).

originals. Furthermore, the main materials are cherry, maple, or lighter woods from Southeast Asia-- not the now -rare but then-popular oaks. Here is an opportunity to discuss changes in economics and global trade. Plus everybody gets a chance to sit down.

The placement and choice of furniture also reveals cultural mind sets that differ from today. One of the best examples comes from Kenneth Ames' work: the form and function of hall furniture.[36] Old paintings or photographs can show the idealized and sometimes actual view of what an "arrangement" ought to look like. They can be revealing of the people who lived in those rooms, their relations to objects and to each other and to other social groups.[37] These can be compared to modern catalogs or domestic magazines. If possible, a visit to a local museum's period rooms or an area historic house will give better depth of understanding. Be warned, however, that the pictures presented today are highly selected and groomed and serve more as an example of prescriptive literature than of life lived. A comparison of one of these rooms to the students' own home or dorm should bring about an understanding of the selective and norm-shaping properties of these arrangements. Scott Swank suggests looking for the following to make the comparison: spatial characteristics, utilitarian purposes, formal characteristics (design and aesthetics), furnishings, and history of the functional concepts of that type of room.[38]

Food and Cooking

Foodways provide interesting means of accessing history. It must be kept in mind, however, that like other forms of culture, food cannot be judged by present standards. Archaeologists have found similar cuts of meat in the trashpits of urban blacks and whites, despite socioeconomic class differences between the two groups.

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36 Kenneth Ames, Death in the Dining Room and Other Tales of Victorian Culture

37 Schlereth, Artifacts and the American Past, 99.

38 In Schlereth, Artifacts and the American Past, 103.

Preparation, something that must be accessed by non-archaeological means, would have made all the difference. Furthermore, the past is different. Meat cuts (heads and feet) people aspiring to higher status today would despite often were considered to be delicacies available only to the wealthy in the 16th century.[39] The same could be true for fish.[40] But, connections between cultures through their food preparation methods can be traced, especially if the "bare bones", the supplemental historical and anthropological records (documents, oral histories, travelers' tales), an understanding of ecology (the natural resources available), and the gut sense provided by ethnographic knowledge of social processes (trying it yourself) are considered.[41]

Technology

Technology provides a necessary means of accessing long-term historical changes which might otherwise be incomprehensible. For any student not regularly exposed to the workings of farm machinery or a factory production line-- and this means most of them, given the United States' momentous transition to a service economy[42]-- a general level of incomprehension seems likely. For students who are haptic learners, such an interaction with technology is vital. Students are accustomed to hearing that the cotton gin and the steam engine revolutionized the United States economy and society-- but how and why? To understand the 19th century, the Civil War and the great Victorian social divides, students must grasp the workings and the wonder of such objects.

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39 Joanne Bowen, "Faunal Remains and Urban Household Subsistence in New England" in Yentsch and Beaudry, Art and Mystery of Historical Archaeology: Essays in Honor of James Deetz (Boca Raton, FL: 1992), 252-267. Bowen has an excellent bibliography on food.

40 Anne Elizabeth Yentsch, "Gudgeons, Mullet, and Proud Pigs: Historicity, Black Fishing, and Southern Myth in Yentsch and Beaudry, 253-316.

41 Yentsch in Yentsch and Beaudry, 308.

42 In 1988, 2.3% of the nation was in agriculture, 3% in mining, 27.3% in manufacturing and construction, 3.7% in transportation, the rest in service-related activities. Source: Statistical abstract of the United states as used in Bailey and Kennedy, American Pageant, A25.

Viewing plans and the machines themselves would be one way to start. There are museums of technology[43] and of science[44] which would have relevant exhibits. The Smithsonian Museum has several halls which are relevant, although selective use of items would be in order, and many objects are untouchable.[45] Building models would be another application, especially if these models were tried out, much like experimental archaeology.

Museums of science and technology present the nature of progress as exemplified by the tools of capitalism. Viewers of these objects may chose to interpret them in one of four styles-- internalist (the things as itself), celebratory, social historical (in context of the development of this and other objects over time), or cultural historical (objects as representing values, beliefs, symbol systems, patterns of behavior)-- but face challenges unique to interpreting technology. Technological objects are often too large to access, much less view. Also, the actual "way things worked" may be lost (lack of manuals or expertise) or difficult to explain (try giving a detailed verbal explanation of how a computer works).[46] It can be done. In the Northeast a number of sites have created museums of textile mills. These are of varying quality of presentation, however, and do not present the sounds and smells of the mill in operation. But for a unit on the Lowell Mill Girls or the Industrial Revolution in general, a sense of workspace is necessary. In the Upper Midwest, the Minnesota Historical Society has designed a exhibit which tells the history of the grain producing region. The exhibit contains a replica of a grain silo which visitors can walk up while reading

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[43] Joseph J. Corn, "Tools, Technology, and Contexts" in Leon and Rosenzweig reviews some.

[44] Aimed at children, such as the Exploratorium in San Franscisco, or adults, like the Boston Museum of Science.

[45] The Space and Aeronautics Museum is perennially a popular draw. Odd how little discussion of the space race occurs within the usual U.S. survey course, despite all of the domestic applications NASA research spawned. Perhaps the popularity of "Apollo 13" will change this, but I doubt it will occur spontaneously, especially as most courses do not reach the 1960s anyway.

[46] These insights come from Joseph J. Corn, "Tools, Technologies, and Contexts: Interpreting the History of American Technics" in Warren Leon and Roy Rosenzweig, eds., History Museums in the United States: A Critical Assessment (Urbana: University of Illinois Press, 1989), 237-261.

panels and then slide down, depending if they choose to act as corn or wheat.[47]

Clothing and Ornamentation

Clothing and adornment offers fascinating research and resources. Some of the most provocative work on clothing and cloth and been performed by anthropologist Laura Schneider. Schneider sees the role of cloth in history in many ways: 1) as a consolidation of social relations in which clothing and fabric communicate social identity and values; 2) an economic artifact that shows how attempts to lower production costs reflected technology and affected labor; 3) symbolic of social groups, which possessed a distinct style (indentities, classes, ethnicity, gender); and, 4) an aesthetic expression.[48] When one looks at colonial United States History and the Plymouth Colony's early sumptuary laws, the Hat Act, and the use of wigs, Schneider's analysis becomes quite helpful. Another example would be the Los Angeles "Zoot Suit Riots" of 1942. As students today amuse themselves with trying the fashion of their parents' generation, clothing becomes a helpful avenue to discuss the issues of economics, ethnicity and gender, social class, and historical memory.

Here's an example from Judith Levin's "Women and Health" class at the University of Wisconsin-Madison.[49] In order to dramatize the restrictive and unhealthy effects of women's clothing (and gender roles) on Victorian women, the Levin would ask a volunteer to stand in front of the class. Over the student's clothing would be placed a twenty-pound fanny pack representing a bustle. Added to that would be

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[47] Author's visit to Minnesota Historical Society, January 13, 1996. No, I didn't slide-- I was wearing heels and a skirt. I will next time, though.

[48] Jane Schneider, "The Anthropology of Cloth", Annual Reviews of Anthropology, 16 (1987), 409-448 is an excellent review article on everything written to date. One of the best examples of economic anthropology I have ever seen is Schneider's "Peacocks and Penguins: The Political Economy of European Cloth and Colors", American Ethnologist 5 (1978), 413-448.

[49] I know this example from my participation in the Women's Studies Program in 1986. Judith Woltzer Levin has also written on childbirth and women and heath in a historic context.

three heavy blankets to approximate petticoats. The student was then asked to walk. No one in the class forgot that exercise!

Transportation

Changes in transportation reflect changes in technology. For students accustomed to automobiles, a review of the time taken to walk distances or to ride by horse show the fundamental differences in the conceptualization of time and space between an earlier time and theirs. Textbooks often make reference to the difficulty in communication resulting from transportation problems (such as the Treaty of Ghent not pre[illegible] the Battle of New Orleans). Improved transportation brought numerous changes -- such as "the canal age", railroad expansion, Civil War supply lines, and "streetcar suburbs"[50] -- and there are specific histories of individual forms of transportation.

Students can map the time and distance of travel of soldiers or settlers (kinesthetic experience). If a rider could reasonably travel twenty-five miles a day by horse, students should figure how long a trip between towns would take. Students can make models (usually a section contains someone who builds model airplanes or cars). Comparison of past, present, and future (each spring brings the annual auto show) can trace change over time.

Art/Music

Art history provides an obvious interdisciplinary connection to Advanced Placement United States History. The test itself uses visual art in object and essay questions. Students should be encouraged to develop visual literacy with an eye to temporality.

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[50] See Sam Bass Warner, Streetcar Suburbs or Kenneth T. Jackson, Crabgrass Frontier

Numerous art history resources abound. The art instructor should be the first expert consulted. Otherwise, museum education professionals at area can provide resources such as slide and museum visits. While students should be aware of the selection and interpretation that goes into the production of museum displays-- as well as the classification of art as "high art" or "folk art" and the marketing of art-- this "metacognition" of art exhibition should parallel the process of document selection for history writers.

Music provides another means to access culture. Although not strictly haptic or bodily-kinesthetic, music stimulates the senses and connects the musical content to personal experience.[51] There is considerable folklore research on music, in the content of songs and in the style of music-making. One journal, The Journal of Folklore, frequently publishes articles on folk songs. School libraries frequently contain oversized volumes of songs from the American Revolution, the labor movement and the Civil Rights Movement. Recordings of these are often available through libraries (perhaps even on vinyl) as well as some record companies. If the score is not available, many songs have been anthologized as telling prose-poetry. Diane Ravitch's The American Reader contains a number of historical songs, such as "John Brown" and "Little Boxes."

Students can be encouraged to study music in several ways. For students who are musically "intelligent", playing or singing a historic song can give them the experiential connection to the subject studied. An unusual instrument, such as a banjo or African drums, can provide a way to discuss regional/cultural differences, as well as provide a new experience. The use of film musicals can also capture attention. I use "1776" every year; after their initial shock, students often leave class

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[51] Alfred J. Fisner, "Searching for the Authentic: The True North and the True Composer", Canadian Journal of Native Studies 8:2 (1988), 165-171.

singing the songs about John Adams' character or the writing of the Declaration of Independence. The film itself provides openings to discuss parliamentary methods as well as the causes of the American Revolution. Songs can be chosen because of their historic significance (such as Billie Holliday's "Strange Fruit" -- a 1920s song about lynching which was denied airplay) or their historical references (such as Joni Mitchell's "Woodstock"). Students can choose songs to represent eras and use songs as mnenomic devices.

Artifacts as Writing Aids

> Not only do artifacts create feelings of nostalgia; they also trigger memories that help people relate past to present. They are very effective teaching tools. But it takes expert skill to maximize that force..."[52]

As we have seen one of the major goals of the Advanced Placement program is the building on writing competence and fluency. Students learn writing best by practicing. This, hopefully, means that they receive reinforcement of writing skills in not only history but also elsewhere in the curriculum. Writing practice, a lot of it, is necessary.

The issue here is how to take something like experiential learning and connect it to powerful writing. Several methods come to mind. First, AP students benefit from exploring a variety of writing styles. Anecdotal evidence from my own experience and that of other instructors shows that this can be done. Journals, letter exchanges, exhibit text are all ways that students can write. Keep in mind that earlier levels of experience can be helpful in connecting analytical connections. Using Bloom's taxonomy and the other techniques previously discussed, writing experiences can be

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52 Adrienne D. Hood, "The Practice of [American] History: A Canadian Curator's Perspective", The Journal of American History, 81 (December 1994), 1011-1019, 1017.

constructed to be analytical or be part of an overall analytical goal.

For kinesthetic learning, writing is possible.[53] Concepts, higher order concepts, can be embedded in the experiential. Other cultures, such as the Luba in Zaire, do this with "memory boards". Nails and colored beads have been embedded in the wood in order to represent the sequence of events which the storyteller explicates.[54] The history student can do much the same. For example, have students at the end of a unit take colored beads (wooden or ones made in ceramics) and separate them into color-coded categories appropriate to that unit (social, political, economic, ideological causes of the Civil War, for example). Then, within each category, label the specific events that will serve as evidence. (This could also be worked backwards, from part to whole, by having the kids take the evidence, labeling, and then sorting). Sort the beads into category. Then string them into a sequence, literally. The sequences can vary by individual-- all one color/type in one group or different color/types mixed. Take the beaded string and have the student use it as their outline for writing. Examine the result. Did it work? If not, why not? Where did, how and why? Try different patterns of bead stringing and then examine different results of essay-writing. Each student should try this several times over the course of a term; the group as a whole can compare their strings of beads and strings of words (essays) with each other. If the beads are used throughout the unit presentation, perhaps students will be able to use them unlabeled later on. This method should work with the most rigid of writing demands: the five-paragraph essay.

This method could also work with labeling note cards and flipping them into hats or paper bags on the floor. For the experiential learner, either way will provide visual and kinesthetic aids for analysis and memory.

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[53] For an argument how MI theory connects to writing see Gerald Grow, "Writing and the Seven Intelligences" (ERIC: March 1995) ED379662.

[54] "Memory: Luba Art and the Making of History", exhibit at the Museum of African Art (New York), March-September, 1996.

Writing can be connected to object analysis, as well. Select a "typical" artifact from a time period or historical concept and have students write a paragraph about it, describing the object and its importance. This could also be expanded into an essay, using all of the aspects of object analysis promulgated by the Winterthur writers. Do this several times throughout the unit with different objects which represent different issues within the theme being taught. For example, if the unit is the Civil War's effects on the United States, the objects could be replicas of Confederate currency, the slipcover to the videotape of "Glory" or Ken Burn's "The Civil War", a copy of The Diary of Mary Boyken Chestnut[55], a Minne' ball and a Thomas Nast cartoon in a reprint of "Harper's Weekly".[56] These could represent the economic, race/ethnicity, gender, technological, and political changes wrought by the war. Students can review their paragraphs before an in-class writing assignment or fashion the writing into a whole essay on their own.

Although the essayists will not be allowed to take their objects into the AP exam with them, they should have had ample opportunity to have written and experienced enough things to make the process easier.

Before proceeding t o the next section, choose a room in your living place. Select ten items that are important to you. Now select five items. Write a topic sentence for each of those items that names the things and states why its is important to you. Arrange these sentences in order. How would you flesh out this essay about late twentieth century culture?

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55 Or a crinoline, which were popular again in the 1950s. There is even a Scarlet O'Hara Barbie doll,but this should not be used unless a deconstruction of the stereotypes and myths of "Gone with the Wind' and Barbie is performed in connection a comparison to the historical research on women's roles in the Civil War.

56 I do NOT recommend use of "Confederate flag". For one thing, it is historically inaccurate being not the actual battle flag of the C.S.A. For another, the current context (1990s)makes the symbolism of this flag too laden with social conflict to be an accurate representation of 1860s. It is more accurate for 1960s, especially at that is the time period when Gov. Wallace urged the state of Alabama to raise this flag as the official state flag. Which Alabama did and which topic is being debated today. Debate over the appropriate use of the "Confederate flag" would suit a unit on the Civil Rights movement, especially after the class has learned about slavery, the Civil War and Reconstruction, the 1920s, and Civil Rights.

Potential Difficulties and Possible Solutions

What about acquiring artifacts for analysis? Try to keep objects local and inexpensive. "Even something as prosaic as a shirt button might provide a focus for a lesson on technological innovations."[57] Students can be asked to produce items fro analysis, and this should anchor their attention and make connections between themselves and the past. As current social history and material culture approaches emphasize, the objects of everyday life can be the most telling.

What about time? These objects are great but history instructors, Advanced Placement ones in particular, are pressed to "cover" the necessary material in time for the exam. There are two possible solutions here. First, many independent school AP USH instructors have the implicit sanction for enrichment, including field trips. Usually these sections are small and should be manageable for release time and transportation purposes. Try to schedule 1-2 field trips per term and use these opportunities to the maximum by presenting them as summative exercises on a unit or time period. Have students work to decode as much as possible and connect to as much as studied. Make them research before and after and journal/sketch during. If there are enough connections to social, political, and economic history the visit will stick in the students' minds much of what has been said in the previous weeks. [To find effective sites, the instructor should take an advance trip on their own]. If possible, a vacation trip to a historic region would be valuable. Also, remember that a number of students travel on their own and they can share their experiences as well. Obviously, this fieldtrip solution takes a lot of time.

Another solution to the time question relies more on ingenuity than resources. While some individual class periods should be devoted to artifact analysis, artifacts (and all the forms of multiple intelligence learning) can be worked into class

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57 David G. Armstrong Social Studies in Secondary Education (New York: Macmillian, 1980).

presentations and activities every (or at least every other) day. Have the kids examine a thing while attendance is taken or outlines are put up or papers are distributed. Use objects are mnenomic devices during a lecture or a slide presentation. These objects can be actual historical items or symbolic representations, as is appropriate to the haptic learning or material culture goals of the instruction. This object use will not take much instructional time. It will take time on the part of the instructor, and this will require some thoughtful planning and experimentation.

What are the limitations of interpretation with material culture?

There are problems associated with the item itself-- we do not know what is was (a fault of our history and anthropology/archaeology) or the object may have had multiple uses. Personal meaning associated with the object may have died with the user or the connection to the people has been lost.[58] Finally, as a number of material culturalists remind us, the historical record is incomplete. Many objects do not survive over time, because they were too fragile in material or because they were used in everyday life.

Another problem area lies with the interpreter. As each person is not divorced from culture and history, they will bring their own perspective/bias to the study of an object. Students, and teachers, must be reminded of what they do not know. Overgeneralizing from the artifact record, or relying solely on the artifacts without exploring the rest of the historical record, can produce results that are hilariously off, such as the family who hung a chamberpot as a planter.[59]

The student must be aware of the complexity of the interpretation. Ethnicity/race, gender, and class-- three major concerns of social history-- apply to

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[58] Indeed, one of the things that folk art collectors are being urged to do is create provenance immediately upon acquisition so that the connection to history is not lost.

[59] For a parallel warning of "pitfalls", see John J. Patrick, "Heritage Education in the School Curriculum: Defining and Avoiding the Pitfalls" (Heritage Education Monograph Series, 1992). Available through ERIC, ED365600. Patrick's pitfalls are elitism, extreme pluralism, localism, romanticism (uncritical analysis), and anti-intellectualism (ignoring the document record).

artifactual historical evidence. An awareness of the critical perspectives produced through each of these lenses will produce a more sophisticated understanding (and, therefore, higher order thinking).

Ethnicity and race has been an ongoing concern of historians and archaeologists. The "archaeology of slavery" is one example. There have developed four main themes to which the study of material culture is key: 1) Living conditions under slavery; 2) status differences within the plantation community 3) relations of planter dominance and slave resistance 4) formation of African-American cultural identity. The presence or absence of certain objects (housing, foodways, ceramics, smoking pipes) may indicate cultural differences between the dominant group and the minority, but the segregation of such objects may in itself create distinct groups that can be marginalized.[60] In additional, observers must be sensitive the variations within groups. At Monticello slave house sites are (finally) being excavated. The types of dwellings, status artifacts, and food remains show great variation even though only house slaves lived in these buildings and social historians assume that everyone's life should have been equally difficult.[61] The artifact record must be combined with other forms of historical evidence in order to provide a more complete view of the past.

Other cultures often view artifacts from a different perspective. For example, Native American people do not view material culture as something that is to be put in museums for display as definition by aesthetic anthropological standards. As expressed by the current "Creation's Journey" exhibit at the National Museum of the American Indian (N ew York), material culture has meaning only in the context of its daily use. To place items on display in a museum divorces them from their meaning

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[60] Theresa A. Singleton, "The Archaeology of Slavery in North America", Annual Reviews of Anthropology, 24: (1995), 119-140.

[61] William M. Kelso, "Big Things Remembered: Anglo-Virginia Houses, Armorial Devices, and the Impact of Common Sense" in Yentsch and Beaudry, 141.

and violates the Native conception of material culture.

Gender can be revealed through a careful study of objects. Feminist archaeology has attempted to see the gendered nature of objects and the reflection of gender relations in objects.[62] Diane diZerenga Wall provides a striking example of gender in archaeology when she reminds an audience that most of the artifacts exhumed by researchers are domestic and therefore women's culture.[63]

Class clearly lies embedded within artifactual remains. The historical archaeologists considering architecture find social messages in house styles. William Kelso finds Virginia colonial plantations not conforming to Deetz's three phase patter on cultural vernacular (English, American, and English revival) but instead maintained an English style throughout the two hundred years. Kelso's explanation rests on the high immigration to Virginia during this period and argues that the buildings' style and design served to remind newcomers of the social and political power that the owners wielded.[64]

Students should be aware that most of the objects displayed in art museums and historic houses have survived because of the owner's importance or the objects value. Again, a examination of the decisions underlying the collection and display decisions can cast light on the nature of historical interpretation as well.

Through these considerations of social history and material culture, we can see the issues of historical evidence interpretation that are significant in the National History Standards and in the Advanced Placement statement of purpose. Historical

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[62] For example, see the work of Diane Wall , The Archaeology of Gender: Separating the Spheres in Urban America (New York: Plenum Publishing Corp., 1994); or, Janet D. Spector, What This Awl Means: Feminist Archaeology at a Wahpeton Dakota Village (St Paul: Minnesota Historical Society Press, 1993); Susan Myers, "At Home in Material Culture", American Quarterly 46:1 (March 1994), 92-100.

[63] Diane diZerenga Wall, "The Archaeology of Women's Roles in Nineteenth Century New York", talk given at New York Unearthed, March 19, 1996.

[64] Kelso, 140.

thinkers must be able to consider and synthesize multiple perspectives when considering any body of evidence. In turn, that evidence will form the basis of their writing and analysis. As the approaches to "haptic history" described above illustrate, that evidence can be experiential and material culture based.

CONCLUSION

My hope has been that this project presents concrete and useful methods to broaden the teaching and understanding of United States History, especially to include students who are too often forgotten in the traditional college-prep curriculum: the haptic learners.

Of course, there is one small drawback to this venture: it needs to be tested. I will certainly be working with my students on these techniques. At the same time, some additional areas of research would be most helpful in supporting the validity and content of the claims I have made here. First, it would be beneficial to have a larger random sample of students in Advanced Placement United States History courses, especially in independent schools, to see what their learning styles are. A study of how memory and analysis works, before and after the use of experiential learning aids (process and artifact), and an analysis of what is retained, would create links between the theory proposed here and its actual application. Finally, the articulation and use of an entire curriculum based on these principles would fully show if the theory can be put into practice, and help to develop methods perhaps not considered here. In other words, all this needs testing.

This project connects to some broad changes in curriculum and instruction overall. These are the debates about the nature of history instruction mentioned above. I am added yet another voice to the din. In additional to the general desire to reform hisotry instruction, three broad changes result from "the things that are good to think with" which have resulted from this project.

First, the organization of historical instruction must go beyond chronological narration. Thematic coherence will result in "higher order thinking". I do not advocate loss of the time-line, however. To strand students without some chronological

organization would be to lose sense of a prime historical factor, causality. Adolescents need a sense of where they are in space and time, as well. How this is to be accomplished is another question. For an introductory survey, I do not think that a purely thematic approach will work unless is carried in some chronological order and connections made to other themes/timeliness. For my own purposes, a restructuring of the curriculum on the basis of essential questions, proven to aid in retention and analysis, is in order.

This may have the most sweeping change as it logically leads to the subject of much curricular debate: interdisciplinarity. Just as life is not segmented in to small units of one topic presented one way, so should education not miss the opportunity to make connections. It seems as small step from introducing objects to working with art and science concepts in the curriculum.

Secondly, the method of instructional delivery must change. As we have seen, too many history classes are still "chalk and talk", often on the assumption that this is what the student will experience in college. This assumptions create self-fulfilling prophecies which justify ignorance of educational research and avoidance of pedagogical self-examination. The lecture mode can be used successfully, true. It has certain benefits, especially when time and class size are issues. But this mode of instruction seems contrary to many of the goals of independent education and of liberal higher education. Are we carrying mental models of large, dusty, lecture halls with droning instructors (a la Ferris Buehler) as the only true education? Is this what we are training our children for?

Perhaps we should allow ourselves and our students to expect better. To allow instructors to know their strengths and build their weaknesses. To allow students to build on their learning in a variety of ways. And, ultimately, to create informed consumers who can demand their rights in a consumer revolution of higher education.

Finally, if curriculum and delivery are to change, so must assessment. There

has been considerable work already in this area. If learning and teaching are to take place in multiple modes, so too must evaluation. Perhaps one day the Advanced Placement U.S. History assessment will not be three hours of frantic scribbling but instead will be a portfolio submission, much like the A.P. Studio Art program already uses. A portfolio would allow for a variety of submission which could reflect different forms of historical learning.

A Final Word

I hope that the "stuff" here has been "things that are good to think with". Try it out and let me know what you think. After all, learning ultimately should be a collaborative process.

your local museums to see what is available.

Gift shops of museums, historic houses, living history farms, National Park Service sites, and living history museums usually have a wealth of materials for sale. Often these sites have Education Departments (or persons) as well.

b. Experiences with material culture

Oral history done with anyone older will reveal how they experienced the past and what objects had significance.

Clubs which focus on activites-- quilting, knitting, folk dance-- can demonstrate and explain various aspects of material culture.

The United States has numerous history museums. A look in the yellow pages under "Historic Sites" yields local sources. The Colonial Williamsburg Foundation (VA), for example, offers summer workshops, including sessions on archaeology.

For living history museums, the most comprehensive guide is

Jay Anderson
The Living History Sourcebook
(Nashville, TN: American Asociation for State and Local History).

See also the article
Vic S. Sussman, "From Williamsburg to Conner Prairie"
U.S. News and World Report
July 24, 1989, pp. 58-62.
It rates ten living history museums and lists resources.

For those interested in learning archaeological methods, summer field experiences ("digs") are available through college and universities (try the departments of anthropology, archaeology, religion, or classical studies). Also, Earthwatch, a for-profit venture, arranges mini-vacations on a variety of research projects.

c. Guides to material culture

The local library should yield sources on a variety of topics, especially on antiques and crafts.

Academic and popular presses consistently publish histories of various topics in material culture. For example, recent topics include studies of the history of lawns, cereal manufacture, housework, and Arts and Crafts furniture have appeared.
(Listening to NPR's programming will also alert you to unusual historical topics).

Read anything by Thomas Schlereth (see bibliography).

Publications lists by the National Association for State and Local History (Nashville, TN), the Winterthur Museum (DE), the American Craft Museum (New York, NY), and the Cooper-Hewitt Museum as well as other sites will yield additional published sources.

Various popular magazines such as "This Old House", "Victoria", "Historic Preservation" provide explanations of historical materials.

Some newspapers carry columns where readers can request information on antiques.

Historic preservation societies provide resources. Try the
National Trust for Historic Preservation
1785 Massachusetts Avenue
Washington, DC 20036
202-673-4000.

New York Landmarks Conservancy
141 Fifth Avenue
New York, NY 10010.

Various academic journals contain reviews of exhibits or articles on material culture. Try
American Quarterly
Journal of American Culture
Journal of Popular Culture
Folklorist
Journal of Interdisciplinary History
American Living History and Farm Association Bulletin (AASLH)
Material History Bulletin.

National History Day
11201 Euclid Avenue
Cleveland, Ohio 44106
216-421-8803

National Archives Trust Fund
Dept. 350
P.O. Box 100793
Atlanta, GA 30384
800-234-8861

National Center for History in Schools
UCLA
Suite 761
10880 Wilshire Boulevard
Los Angeles, CA 90024-4108

Jackdaw Publications
Division of Golden Owl Publishing
P.O. Box 503
Amawalk, NY 10501
800-789-0022
(specializes in document packets suitable for jigsaw learning)

Rethinking Schools
1001 East Keefe Avenue
Milwaukee, WI 53212
414-964-9646

4. Publications for history teachers

History Matters! (NCHE)
OAH Magazine of History (for secondary school teachers)
Journal of American History (AHA)
Teaching History: A Journal of Methods
Social Education (NCSS)
Social Studies

5. Resources for Advanced Placement History teachers

The Advanced Placement Program publishes guides as well as sponsors workshops for AP teachers. Contact your regional office or the College Board (Princeton, NJ).

There is an America Online account for AP teachers. Contact: Jason Slack, jslack2@ocmvm.onondaga.boces.k12.ny.us.

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Kagan, Spencer. Cooperative Learning (San Juan Capistrano, CA: Kagan Cooperative Learning, 1992).

An overwhelmingly complete how-to manual with applications for every situation.

Kolb, David A. Experiential Learning: Experience as the Source for Learning and Development (Englewood Cliffs, NJ: Prentice-Hall, 1984).

Provides history of experiential learning as well as Kolb's theory.

Knapp, Clifford E. "Progressivism Never Died-- It Just Moved Outside: What Can Experiential Educators Learn from the Past?" The Journal of Experiential Education 17:2 (August 1991) 8-12.

Defines progressive education and Dewey's ideals. He connects progressive education to outdoor education and cognitive psychology.

McDavitt, David S. "Teaching for Understanding: Attaining Higher Order Learning and Increased Achievement through Experiential Instruction" (ERIC: May 1, 1994 , ED374093).

This is a technical report which provides an excellent history of experiential learning in U.S. classrooms, and gives the data from McDavitt's own classroom use of experiential learning with third-graders in science.

Slavin, Robert E. Cooperative Learning: Theory, Research, and Practice (Boston: Allyn and Bacon, 1995).

A how-to manual with extensive research reporting and bibliography.

Slavin, Robert E. "Synthesis of Research on Cooperative Learning", Educational Leadership (February 1991), 71-82.

A simple, comprehensive overview of cooperative learning.

Material Culture Studies (variety of disciplines)

Ames, Kenneth. Death in the Dining Room and Other Tales of Victorian Culture (Philadelphia: Temple University Press, 1992).

This lavishly-illustrated book has three texts, argues Ames: the pictures of the objects, the captions to the pictures, and the text itself. Ames shows how Victorian cultural values were expressed in their objects-- the front hall, sideboards, stitched samplers, sheet music, and how people sat in chairs. Ames trained at Winterthur, and occasionally his analysis overemphasizes "high art" and upperclass culture.

Boyd, Willard L. "Museums as Centers of Learning" Teachers College Record 94:4 (Summer 1993), 760-770.

Boyd, of the Field Museum of Natural History (Chicago) explains how exhibits are organized: by different levels of experience (introductory with no previous exposure to subject, intermediate with thematic exploration, and advanced , which serve as resource centers). This has parallels to the levels of historical thought.

Bruner, Edward M. "Abraham Lincoln as Authentic Reproduction: A Critique of Postmodernism" American Anthropologist 96:2 (June 1994) 397-415.

Bruner critiques the postmodernist (in social sciences) tendency to deconstruct living history museums and thereby assume history as pure and site visitors as monolithic. Bruner gives the example of New Salem (IL) and shows how the site makes meaning in different ways for different visitors.

Carson, Barbara M. "Interpreting History through Objects" in Ken Yellis, ed. "Interpreting Historic Sites and the Built Environment", Journal of Museum Education: Roundtable Reports 10:3 (Summer 1985), 2-5.

Simple, easily explained piece about how to connect things to people. Brings method to life with clear example. Entire issue is enjoyable reading.

"Creation's Journey: Masterworks of Native American Identity and Belief" (permanent exhibit) National Museum of the American Indian, New York, NY.

The exhibit contains objects, settings, and panel text which encourages the viewer to

Describes reasons for studying material culture and presents a method for analysis of artifacts (description, deduction, speculation). Presents perspectives of various fields (psychology, archaeology, social history) but stays with art history approach.

Sanford, Douglas W. "Material Life in revolutionary America: Artifacts and Issues in the Classroom" OAH Magazine of History 8:4 (Summer 1994) 27-31.

Gives overview of how material culture reflects major changes in Revolutionary America (daily life, African-American experience, war's effects on people). Some evidence presented, but no classroom methodology articulated.

Schlereth, Thomas J. Artifacts and the American Past (Nashville, TN: American Association for State and Local History, 1980).

Collection of essays . Most useful is "Historic House Museums: Seven Teaching Strategies". Schlereth provides both method and bibliography.

Schlereth, Thomas J. Cultural History and Material Culture: Everyday Life, Landscapes, Museums (Ann Arbor, MI: UMI Research Press, 1989).

Collection of essays on material culture as a discipline, with examples of material culture analysis. The essays on plants , cities, mail-order catalogs, and landscape as material culture as useful examples.

Schlereth, Thomas J. Material Culture Studies in America (Nashville, TN: American Association for State and Local History, 1982).

Collection of important articles in material culture studies.

Schlereth, Thomas J. "Teaching History with Material Culture Evidence", The International Journal of Social Education 1:1 (Spring 1986) 5-36.

Complete overview of definitions, uses in history, analytical approaches, and pitfalls of material culture use in teaching history. Extensive footnotes.

Seale, William. "Past Presence: Interpreting Lifestyles through Material Culture" OAH Magazine of History 8:4 (Summer 1994) 12-17.

Explains how historical presentation of historic houses is unique. Example is of Stratford Hall Plantation (VA).

Singleton, Theresa A. "The Archaeology of Slavery in North America" Annual reviews in Anthropology 24 (1995) 199-140.

Bower, Bert, Jim Lobdell, and Lee Swenson. History Alive!: Engaging All Learners in the Diverse Classroom (Menlo Park, CA: Addison-Wesley Publishing Co., 1994).

This Teachers' Curriculum Institute volume is an introduction to innovative history teaching. The group argues that higher order thinking can be taught via multiple intelligences theory, cooperative interaction, and spiral instruction in the multicultural classroom. The authors focus on six teaching strategies-- interactive side lectures, social studies skill builders, experiential exercises, problem-solving groupwork, response groups, and writing for understanding-- which foster learning. They also give examples of each, testimony by teachers who have used the strategies, and a discussion of the "tools for implementing an active approach" (class room interaction, interactive notebooks, authentic assessment". Sometimes repetitive, it nicely explains some theory basics as well as method.

Capps, Kline and David E. Vocke. "Developing Higher-level Thinking Skills Through American History Writing Assignments" OAH Magazine of History (Fall 1991) 6-9.

Argues for use of writing assignments drawing from evidence with multiple perspectives as a means of enhancing higher order thinking. Gives example and shor reference list.

Cardinale, Gary W. "Whole Brain or Whole Bored", Social Studies Review: A Publication of the American Textbook Council 29:2 (Winter 1990) 36-45.

Argues that students need to be appealed to in each of the three main modalities of learning (oral, visual , and kinesthetic). for both left brain (rational) and right brain (creative) learning. Gives exaples of teacher presentation, student presentation, and assessment for each.

Epstein, T. "*America Revised* Revisited: Adolescent's Attitudes toward United States History Textbooks" Social Education 58:1 (1994), 41-44.

Presents overview of critique of textbooks and presents result f study on high school student' reaction to their U.S. History texts: 71% of students surveyed found their books lacking in historical analysis (significance statements), a much higher percentage than adults surveyed on the same item.

"The History Colloquium Manual: Energizing Professional Development for History Teachers" (Westlake, OH: National Council for History Education, Inc., 1994).

Manual resulting from NCHE's "History Academy" . Presents philosophy of history teaching, practical advice on how to run a colloquium, and examples of content. One area the workshop includes is a presentation on how to look at artifacts (see

Supervision and Curriculum Development, 1993).

An introduction to constructivist education. Thought-provoking.

Gardner, Howard. The Unschooled Mind: How Children Think and How Schools Should Teach (New York: Basic Books, 1991).

Combines cognitive science with educational practice. Reviewed each of the disciplines in turn.

Jacobs, Heidi Hayes. Interdisciplinary Curriculum: Design and Implementation (Alexandria, VA: Association for Supervision and Curriculum Development, 1989).

An overview of interdisciplinary curriculum by its foremost proponent.

Rothman, Robert. Measuring Up: Standards, Assessment, and School Reform (San Francisco: Jossey-Bass Publishers, 1995).

A general-public overview of assessment. Many references.

Wiggins, Grant. Assessing Student Performance: Exploring the Purpose and Limits of Testing (San Francisco: Jossey-Bass Publishers, 1993).

An overview of testing with a view of alternative assessment by of the leaders in the field.

Willis, Scott. "Interdisciplinary Learning: Movement to Link the Disciplines Gains Momentum" ASCD Curriculum Update (November 1992).

An examination of the pros and cons of interdisciplinary curriculum and its applications.

What's the LCPC?

The Learning Channel Preference Checklist (LCPC) is the quickest, most up-to-date, reliable indicator of learning style preference for students in grades 5-13. A one-page self rating inventory asks students to rank their learning preferences on three scales: visual, auditory and haptic.

- Tell the students that you are interested in understanding the way they learn best.
- There are no right or wrong answers.
- Every person has a unique neurological blueprint...we all learn differently.
- Practical suggestions for studying will be given to each student according to their learning preference.

Administering the LCPC

- Distribute the LCPC and the scoring sheet to each student.
- Read the statements out loud and discuss their meanings.
- Students write their response number on line.
- Follow directions on "Scoring the LCPC" sheet.
- Caution students to carefully transfer their response numbers from the LCPC to the corresponding numbers on the scoring page.
- To convert each category score to a percentage, divide the total score into the category score.
- Record the percentage on the indicated line.
- Fill in the pie graph, sketching and labeling in the percentage for each of the three categories.

Interpreting the LCPC

The more you know about learning styles, the better you'll be able to interpret the results of the LCPC. Students are intensely curious about what the scores mean. Indeed, all of us are genuinely interested in exploring the ultimate interesting subject...tell me more about me!

Like fingerprints and voices, each person's learning style is different. It determines how students approach a task and remember information. It also shows what they know on a test. Learning style research has mounted in the past decade, demonstrating the value of matching students' learning styles with appropriate instruction. A growing number of educators throughout the country have realized that understanding and implementing these research findings increase the options for dealing with the learning process. Learning styles make both the teacher and the student aware of "what really works" for any individual. Learning style honors diversity.

Students must be aware of their learning style and how it relates to their way of studying and taking tests. This focus on students is as important as getting teachers to adapt instruction. Students want to know how to learn, produce more, and increase their level of achievement.

For a majority of students, this exercise may be the first time they have ever given any thought to how they actually learn. In explaining the percentages, tell them that the larger the discrepancy the more visual, auditory or haptic they are. Since this is a personal, subjective measure, students should be reminded that their cluster percentages will indicate what is usually true for them, as they perceive it.

Visual Learning Preference

Many people learn best when they can "see" the information. They prefer textbooks over lectures; rely on lists graphs, charts, pictures; and take lots of notes. On this test, approximately 40 percent of students demonstrate a visual learning style.

Auditory Learning Preference

The least developed learning channel for most students is the auditory, yet approximately 80 percent of secondary instruction is conveyed via the lecture format. Less than 15 percent of the student population shows this as their strongest learning channel.

Haptic Learning Preference

Haptic is a Greek-based word meaning "moving and doing." This style is represented by about 45 percent of students on the LCPC. Haptic students show a cluster of characteristics associated with right brain dominance.

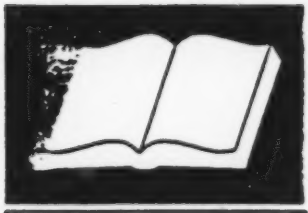
Athletic	Musical	Disorganized	Anti-desk
Move a lot	Procrastinate	Intuitive	Trouble taking tests
Creative	Impulsive	Anti-proofread	Think whole-to-part
Messy notes	Doodle	Frequent breaks	Math-no sequence
Study with music	Daydreams	Creative speller	Use fingers to count
Fix things	Artistic	Learn best by doing	Doesn't follow directions

Haptic students learn best when they are involved, moving, experiencing and experimenting; learn more from doing than from reading textbooks; and learn least from listening to lectures. They are hands-on learners.

The Learning Channel Preference Checklist

- LCPC -

A quick, up-to-date, reliable indicator of learning style preference for students in grades 5-13.



VISUAL

AUDITORY

HAPTIC

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Let's look more specifically at a few profiles.

Student A

Visual 48%
Auditory 23%
Haptic 29%

This is a stronger visual learner.

Student B

Visual 32%
Auditory 33%
Haptic 35%

Relatively "flat" or even scores are seen very often among both the gifted and learning disabled population. With the latter group, preference has not yet been neurologically established; L.D. students often do not know what works best for them. They do not have a clearly defined method for processing information. Whereas, among the gifted and talented, all three channels are developed and the modality which best matches the task is used. When rating themselves, gifted kids will question and want to qualify their responses. It is also not that uncommon to see students above the age of 16 have this kind of profile. Again, all 3 modalities are neurologically developed and able to be tapped.

Student C

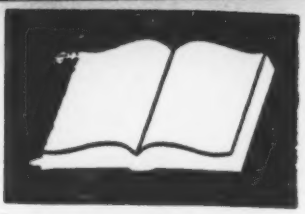
Visual 36%
Auditory 27%
Haptic 37%

This is a very frequent pattern where the student has combined visual/haptic preference. Pass out the studying suggestions for both the visual and haptic learners.

Specific Learning Techniques

Once the students' learning style has been assessed, the teacher should provide and discuss the appropriate recommendations for Visual Learners, Auditory Learners, and Haptic Learners. Those students who show a combination of two or three preferences should receive the recommendations for each of their preferences. It is important to discuss these recommendations with the class and to emphasize that they are *suggestions*. They will not all work to the same degree for everyone. Encourage students to try them and to determine which work better for them and which do not work as well. Give all techniques a fair try.

The more knowledgeable and comfortable students are about their own learning style the more they will participate and share responsibility for learning. Providing a concrete questionnaire such as the Learning Channel Preference Checklist and the practical follow-up techniques enable students on all levels to experience greater success.



Suggestions for Visual Learners

You will learn better when you read or see the information. Learning from a lecture may not be as easy. Try some of these suggestions and create some more that will work for you.

- Write things down because you remember them better that way (quotes, lists, dates, etc.).
- Look at the person while they are talking. It will help you to stay focused.
- It's usually better to work in a quiet place. However, many visual learners do math with music playing in the background.
- Ask a teacher to explain something again when you don't understand a point being made. Simply say, "Would you please repeat that?"
- Most visual learners study better by themselves.
- Take lots of notes. Leave extra space if some details were missed. Borrow a dependable student's or teacher's notes.
- Copy over your notes. Re-writing helps recall.
- Use color to highlight main ideas in your notes, textbooks, handouts, etc.
- Before reading an assignment set a specific study goal and write it down. Post it in front of you. Example, "From 7:00 to 7:30 I will read the first chapter."
- Preview a chapter before reading by first looking at all the pictures, section headings, etc.
- Select a seat furthest from the door and window and toward the front of the class, if possible.
- Write vocabulary words in color on index cards with short definitions on the back. Look through them frequently, write out the definitions again, and check yourself.

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Suggestions for Auditory Learners

You will learn better when information comes through your ears. You need to hear it. Lecture situations will probably work well for you. You may not learn as well just reading from a book. Try some of these suggestions and create some more that will work for you.

- Try studying with a buddy so you can talk out loud and hear the information.
- Recite out loud the thing you want to remember (quotes, lists, dates, etc.).
- Ask your teachers if you can turn in a tape or give an oral report instead of written work.
- Make tape cassettes of classroom lectures, or read class notes onto a tape. Summarizing is especially good. Try to listen to the tape three times in preparing for a test.
- Before reading a chapter, look at all the pictures, headings, and talk out loud and tell what you think this chapter will be about.
- Write vocabulary words in color on index cards with short definitions on the back. Review them frequently by reading the words aloud and saying the definition. Check the back to see if you were right.
- Before beginning an assignment, set a specific study goal and say it out loud. Example, "First, I will read my history chapter."
- Read aloud whenever possible. In a quiet library, try "hearing the words in your head" as you read. Your brain needs to hear the words as your eyes read them.
- When doing complicated math problems, use graph paper (or use regular lined paper sideways) to help with alignment. Use color and graphic symbols to highlight main ideas in your notes, textbooks, handouts, etc.

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Suggestions for Haptic Learners

You will learn best by doing, moving, or hands-on experiences. Getting information from a textbook (visually) or a lecture (auditorily) is just not as easy. Try some of these suggestions and create some more that will work for you.

- To memorize, pace or walk around while reciting to yourself or looking at a list or index card.

- When reading a textbook chapter, first look at the pictures, then read the summary or end-of-chapter questions, then look over the section headings and bold-faced words. Get a "feel" for the whole chapter by reading the end selections first, and then work your way to the front of the chapter. This is working whole-to-part.

- If you need to fidget when in class, cross your legs and bounce or jiggle the foot that is off the floor. Experiment with other ways of moving; just be sure you're not making noise or disturbing others. Try squeezing a tennis or nerf ball.

- You may not study best at a desk, so when you're at home, try studying while lying on your stomach or back. Also try studying with music in the background.

- If you have a stationary bicycle, try reading while pedaling. Some bicycle shops sell reading racks that will attach to the handle bars and hold your book.

- Use a bright piece of construction paper in your favorite color as a desk blotter. This is called color grounding. It will help to focus your attention. Also, try reading through a colored transparency. Experiment with different colors and different ways of using color.

- When studying, take breaks as frequently as you need. Just be sure to get right back to the task. A reasonable schedule is 20-30 minutes of study and 5 minutes of break. (TV watching and telephone talking should <u>not</u> be done during break time!)

- When trying to memorize information, try closing your eyes and writing the information in the air or on a desk or carpet with your finger. Picture the words in your head as you do this. If possible, hear them too. Later, when trying to recall this information, close your eyes and see it with your "mind's eye" and "hear" it in your head.

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Learning Channel Preference Checklist

Read each sentence carefully and think about how it applies to you. On each line, write the number that best describes your reaction to each sentence.

5-ALMOST ALWAYS 4-OFTEN 3-SOMETIMES 2-RARELY 1-ALMOST NEVER

_____1. I can remember something better if I write it down.
_____2. When reading, I listen to the words in my head or I read aloud.
_____3. I need to discuss things to understand them better.
_____4. I don't like to read or listen to directions; I'd rather just start doing.
_____5. I am able to visualize pictures in my head.
_____6. I can study better when music is playing.
_____7. I need frequent breaks while studying.
_____8 I think better when I have the freedom to move around; studying at a desk is not for me.
_____9. I take lots of notes on what I read and hear.
_____10. It helps me to LOOK at a person speaking. It keeps me focused.
_____11. It's hard for me to understand what a person is saying when there is background noise.
_____12. I prefer having someone tell me how to do something rather than having to read the directions myself.
_____13. I prefer hearing a lecture or tape rather than reading a textbook.
_____14. When I can't think of a specific word, I use my hands a lot and call something a "what-cha-ma-call-it" or a "thing-a-ma-jig."
_____15. I can easily follow a speaker even though my head is down or I'm staring out the window.
_____16. It's easier for me to get work done in a quiet place.
_____17. It's easy for me to understand maps, charts and graphs.
_____18. When beginning an article or book, I prefer to take a peek at the ending.
_____19. I remember what people say better than what they look like.
_____20. I remember things better if I study aloud with someone.
_____21. I take notes, but never go back and read them.
_____22. When I am concentrating on reading or writing, the radio bothers me.
_____23. It's hard for me to picture things in my head.
_____24. I find it helpful to talk myself through my homework assignments.
_____25. My notebook and desk may look messy, but I know where things are.
_____26. When taking a test, I can "see" the textbook page and the correct answer on it.
_____27. I cannot remember a joke long enough to tell it later.
_____28. When learning something new, I prefer to listen to information on it, then read about it, then do it.
_____29. I like to complete one task before starting another.
_____30. I use my fingers to count and I move my lips when I read.
_____31. I dislike proofreading my work.
_____32. When I am trying to remember something new, for example, a telephone number, it helps me to form a picture of it in my head.
_____33. For extra credit, I prefer to do a report on tape rather than write it.
_____34. I daydream in class.
_____35. For extra credit, I'd rather create a project than write a report.
_____36. When I get a great idea, I must write it down right away or I'll forget it.

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Scoring The LCPC

CAREFULLY transfer your score onto each line:

1. ____	2. ____	4. ____
5. ____	3. ____	6. ____
9. ____	12. ____	7. ____
10. ____	13. ____	8. ____
11. ____	15. ____	14. ____
16. ____	19. ____	18. ____
17. ____	20. ____	21. ____
22. ____	23. ____	25. ____
26. ____	24. ____	30. ____
27. ____	28. ____	31. ____
32. ____	29. ____	34. ____
36. ____	33. ____	35. ____

Visual Total: ____ Auditory Total: ____ Haptic Total: ____

Visual Total: ____
Auditory Total: ____
Haptic Total: ____
Total of All 3 Categories: ____

Convert each category to a percent:

Visual = $\frac{\text{visual score}}{\text{total score}}$ = ____%

Auditory = $\frac{\text{auditory score}}{\text{total score}}$ = ____%

Haptic = $\frac{\text{haptic score}}{\text{total score}}$ = ____%

Sketch in Your Profile

Visual ____%
Auditory ____%
Haptic ____%

Appendix K-1 includes the questions we use to guide discussion of this letter. These same questions can be applied to other letters, other documents, and other kinds of primary sources.

A significant outcome of this session should be for participants to realize that the creative aspect of history is asking the right questions, not researching the answers. Researchers can dig out facts, but historians know where to dig and what to look for.

How to integrate photographs and artifacts into the classroom - A session dealing with photographs and artifacts introduces the idea that primary sources are not limited to print materials. As with documents, we want participants and their students to ask questions that an historian might ask about photographs and artifacts.

For example, historian/leader Lawrence McBride of Illinois State University at Normal developed a session on techniques to be used when examining a family photo (see Appendix P). The technique will be useful in an elementary school class studying family history, in a middle school class on local/neighborhood history, or in a high school class that uses photos in U.S. or World History. Students and teachers might ask questions such as:

- Why was the picture taken?
- What kinds of clothing are they wearing?
- What else appears in the picture that tells you about the family?
- Are they happy or sad? Why?

When examining an artifact, you might ask questions such as:

- What is it?
- What was it used for?
- Who might have used it?
- Who made it?
- Where was it made?
- What does it tell you about the people who used it?

Music recordings, oral history, movies, and video can also fit into this category of alternative primary sources. Similar sets of analytic questions can be developed to help students find out about the people who sang, spoke, listened to, watched, or produced these alternative primary sources. One point of emphasis about alternative primary sources is that they are good ways to help teach history to students who have difficulty reading.

Another successful way to work with artifacts is what we have called the *Classroom Museum*. The idea is usually introduced during the wrapup session on the first day. One of the leaders asks the participants to go home that evening and look for something "old" to bring in on the third day. By something old, we mean old pictures, books, clothing, quilts, toys, tools, or other artifacts. On the third day, our meeting room became the *Museum*. Participants brought items in the morning and placed them around the room under signs with dates, 1930s, 1940s, 1950s, etc., so that the items were organized chronologically.

In the session right before lunch, one of the leaders would hold up each item and ask the person who brought it to be the curator. That person would stand up and describe where it came from and how it came into his or her possession. If the artifact was not easy to identify, the leader might first ask the participants to try to deduce the identity of the artifact and explain its function before having the owner give an explanation.

When using this activity in the classroom, teachers might ask the students to fill out an index card with the following information:

- the name of the artifact,
- the date the artifact was made,
- its use,
- the country, region, state or city of origin,
- how the artifact came into the hands of the person who brought it.

Another variation on the *Classroom Museum* is to arrange the items by kind, instead of chronologically. In other words, all books in one area, all toys in another, all tools in a third and so on.

One school from an NCHE colloquium program created their *Classroom Museum* and opened it up in the evening for parents to come and visit. The idea of a *Classroom Museum* is flexible and our participants have found it a valuable way to expand the idea of a primary source. It provides a natural transition into the formal analysis of artifacts (see Appendix O).

How are other states organizing their curriculum K-12 - When school districts were involved in a social studies curriculum revision, a session in which we discussed what other states are doing was often requested.

A good starting point is the California History-Social Science Framework. It is a real curriculum that exists not only in theory but also in practice. It also shows how one state is putting into practice many of

Appendix O

Guide for Analyzing Artifacts

1. **What might this artifact be?**
   a. Is there a name on it?
   b. Are there any instructions for its use?
   c. Does it have an indoor or outdoor use?
   d. Is it for heavy or light duty?
   e. Are there any moving parts?
   f. What happens when they are moved?

2. **How old is the artifact?**
   a. Is there a date on it?
   b. Can you tell the age by looking at the artifact?
   c. Did it do something that was useful only during a certain historic period?

3. **What is the artifact made of?**
   a. Are the component parts of the artifact rare or unusual, or are they made from commonplace materials?
   b. Do the materials used to make this artifact present any special problems to the manufacturer?

4. **Was the artifact manufactured with a machine or was it hand made?**
   a. Would special skills have been required to make it?
   b. Did the person who made it have a good plan or just a rough idea?
   c. Is the artifact aesthetically pleasing in overall design in its details?

5. **Are there any distinguishing marks on the artifact?**
   a. Are there any labels?
   b. Is there a signature?
   c. Is there a patent number?
   d. Are there any marks made through use?
   e. Are there any marks made on purpose (for example, gradations for measuring)?

6. **Where was the artifact made?**
   a. Is the place of manufacture identified on the artifact?
   b. Is there a trade mark on the artifact?
   c. Can you contact the manufacturer?
   d. Is this type of artifact produced mainly in one locality or region?

7. **Does the artifact tell us anything about the people who might have used it?**
   a. What might their socio-economic status have been?
   b. What might the artifact reveal about their culture or occupation?
   c. Would a man or woman, or an adult or child, use this object?

8. **What is the value of this artifact?**
   a. Consider the material it is made from and the quality of the construction.
   b. Was it made to last for an extended period of time or was it disposable?
   c. Was it a luxury item or a necessity?
   d. Was it ornamental or functional?
   e. Is this artifact more valuable because it is associated with famous people, places, or events?
   f. How much would you be willing to pay for this item today, in its present condition?

9. **Is there an object comparable to this artifact available today?**
   a. If this artifact is no longer in use, what has replaced it?
   b. Why might the artifact have fallen out of use?
   c. How is today's item similar?
   d. How is it different?

Lawrence W. McBride
Illinois State University (1994)

"GRAB-BAG" ARCHAEOLOGY
DISCOVERING THE PAST THROUGH ARCHAEOLOGY

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